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ANAHEIM SPORTS CENTER

EIR NO. 320
SCH. 95041029

DRAFT ENVIRONMENTAL IMPACT REPORT

Prepared for the
CITY OF ANAHEIM
Planning Department
200 South Anaheim Boulevard
Anaheim, California 92805

Attn: Greg McCafferty, Associate Planner

INSTITUTE OF GOVERNMENTAL
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UNIVERSITY OF CALIFORNIA



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January 1996



CITY OF ANAHEIM, CALIFORNIA

Planning Department

PUBLIC NOTICE OF AVAILABILITY

SUBJECT:

Draft Environmental Impact Report (EIR) No. 320, Anaheim Sports Center, is available for public review.

WHERE IS THE PROJECT AND WHAT IS PROPOSED:

The Draft Environmental Impact Report (EIR) has been prepared in compliance with the California Environmental Quality Act (CEQA) and the State and City of Anaheim CEQA Guidelines for the proposed development of the Anaheim Sports Center Urban Design Plan. The Anaheim Sports Center Urban Design Plan is proposed to guide development of the 159-acre Anaheim Stadium property in addition to approximately 8 acres of land contiguous thereto located at the southeast corner of State College Boulevard and Katella Avenue. The plan proposes the renovation of the existing Anaheim Stadium, reconfiguration of the 16,000-space parking area to include 14,000 onsite spaces, construction of a new stadium with a seating capacity of 45,000 or 70,500 seats, complimentary land uses consisting of retail/entertainment, office, continuing exhibition activities, two hotels, a youth sports center and available offsite parking to be utilized during major sporting events. The plan establishes an overall identity for the project area including gateway elements, signage, street furnishings and pageantry elements which are intended to create a consistent visual theme and unify the Anaheim Sports Center. The plan includes the following project components: renovation of Anaheim Stadium and a new stadium with a net increase of 45,000 seats; a 750-seat youth stadium; up to 750,000 square feet of urban entertainment retail; two hotels totaling 500 rooms; up to 900,00 square feet of office; and continuing exhibition center activities totaling 150,000 square feet. The plan will also include design guidelines, a streetscape program, and a public facilities plan. The plan area is currently zoned PR (Public Recreational), ML (Limited Industrial) and CO (Commercial, Office and Professional). Approval of the plan would replace the ML and CO zoning designations with the PR zoning designation. As described in the EIR, property acquisition for implementation of the plan may occur.

Related actions, which are addressed in DEIR No. 320 and which may occur in conjunction with the proposed project described above include but are not limited to: general plan amendments, zone changes, conditional use permits, subdivision plans, financing mechanisms, owner participation agreements, disposition and development agreements and other agreements, abandonment of streets and subsurface rights, demolition permits, grading permits, building permits, encroachment permits, property acquisition, relocation, implementation and amendments to the Recovery Plan for the Anaheim Stadium Project Area, and revision to stadium area development fees.

Significant effects on the environment anticipated as a result of implementation of the Specific Plan include air quality, schools and solid waste.

INFORMATION AVAILABLE:

Copies of Draft EIR No. 320 and all documents referenced are available for review or arrangements can be made for review and/or purchase at the City of Anaheim Planning Department, 200 South Anaheim Boulevard, Anaheim, California 92805. Copies of Draft EIR No. 320 are available for review at all Anaheim City Libraries. For further information, please contact the Anaheim Planning Department at (714) 254-5139.

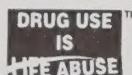
PUBLIC COMMENT PERIOD:

All interested parties are invited to submit written comments relating to the above project. Written comments should be submitted to the City of Anaheim Planning Department, 200 South Anaheim Boulevard, Anaheim, California 92805 on or before March 1, 1996.

The public hearing process will commence following the public review period. A separate public notice advertising the hearing date will be provided.

Date: January 17, 1996
aa3344ly.wp

200 South Anaheim Boulevard
P.O. Box 3222, Anaheim, California 92803 (714) 254-5139



**ANAHEIM SPORTS CENTER
DRAFT EIR NO. 320
SCH. 95041029**

Prepared for:

**City of Anaheim
Planning Department
200 South Anaheim Boulevard
Anaheim, California 92805**

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January 1996

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SECTION 1 INTRODUCTION

1.1 PURPOSE AND SCOPE OF THE EIR

PURPOSE OF THE EIR

The City of Anaheim is the lead agency under the California Environmental Quality Act (CEQA) and is responsible for preparing the Anaheim Sports Center EIR which sets forth a comprehensive development program to enhance and revitalize an area of approximately 167 acres encompassing the existing Anaheim Stadium site, including approximately 8 acres at the southeast corner of Katella Avenue and State College Boulevard not currently a part of the Anaheim Stadium property. This EIR has been prepared in conformance with the CEQA (California Public Resources Code Section 21000 et seq.), California CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA as adopted by the City of Anaheim.

The draft EIR is intended to serve as an informational document for the public agency decision makers and the general public regarding the objectives and components of the proposed project, as well as the potential environmental impacts, and to describe mitigation measures and reasonable alternatives to the project. This EIR is further intended to serve as the primary environmental document for subsequent actions within the Anaheim Sports Center project site, including all local discretionary approvals requested to implement the project, and to serve as the primary reference document in the formulation and implementation of a mitigation reporting or monitoring program for the EIR. Future developments not anticipated by this EIR will require subsequent environmental review in compliance with State CEQA Guidelines.

The City of Anaheim, which has the principal responsibility for processing and approving the project, and other public agencies (i.e., responsible agencies) that may use this EIR in the decision making or permit process will consider the information in this EIR along with other information that may be presented during the CEQA process. A more detailed discussion and identification of the responsible agencies is provided later in this section. In accordance with CEQA, the public agencies will be required to make findings for each environmental impact of the project that cannot be mitigated to below a level of significance. If the lead agency and responsible agencies decide that the benefits of the proposed project outweigh unmitigated significant environmental effects, they will be required to make a statement of overriding considerations stating reasons to support their action.

This draft EIR was prepared by a consultant under contract to the City of Anaheim. Prior to public review, it was extensively reviewed and evaluated by the City of Anaheim staff. This draft EIR reflects the independent judgement of the City of Anaheim as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel are provided in Sections 9 and 10 of this EIR, respectively.

The Anaheim Sports Center EIR is a project EIR that examines the environmental effects of a specific project. The intent of the document is to analyze the environmental effects of the proposed Anaheim Sports Center project to the degree of specificity required by Section 15146 of the State CEQA Guidelines. It is anticipated that upon certification of this EIR, no additional CEQA review will be required for project implementation. The project may require subsequent approvals including, but not limited to, financing mechanisms, owner participation agreements, disposition, development and other agreements, abandonment of streets or subsurface rights, General Plan amendments, conditional use permits, demolition permits, grading permits, building permits, encroachment permits, property acquisition, relocation, implementation and amendments to the Recovery Plan for the Anaheim Stadium Project Area, and revision of stadium area development fees. The lead agency, as well as other responsible agencies (i.e., Redevelopment Agency), can approve subsequent actions without additional environmental documentation unless as otherwise required by Public Resources Code Section 2166 and State CEQA Guidelines Sections 15162 and 15163.

SCOPE OF THE EIR

This EIR addresses the potential environmental effects of the proposed project. The scope of the EIR includes both areas of controversy identified by the City of Anaheim during the preparation of the Notice of Preparation (NOP) and issues raised by agencies and the general public in response to the NOP and at the scoping meeting, as described below.

Scoping Process

In compliance with the State CEQA Guidelines, the City of Anaheim has taken steps to maximize opportunities to participate in the environmental process. During the preparation of the draft EIR, an effort was made to contact various federal, state, regional, and local governmental agencies and other interested parties to solicit comments and inform the public of the proposed project. This included the distribution of an NOP on April 7, 1995, and public scoping meeting on the EIR on April 26, 1995. The project was described, potential environmental effects associated with project implementation were identified, and agencies and the public were invited to review and comment on

the NOP. The close of the NOP review comment period was May 8, 1995, although letters received later were accepted.

The NOP and comment letters received during and after the NOP review period are included in Appendix A of this EIR.

Agencies, organizations, and interested parties not previously contacted or who did not respond to the NOP currently have the opportunity to comment during the 45-day public review period on the draft EIR.

1.2 EIR FOCUS AND EFFECTS FOUND NOT TO BE SIGNIFICANT

Based on the NOP, a determination was made that an EIR is required to evaluate the potentially significant environmental effects of the proposed project. The EIR should address all the potential environmental effects identified in the NOP. The potential significant issues related to development of the project included land use; transportation and circulation; air quality; noise; earth resources; hydrology and water quality; employment, population, and housing; public services; utilities and energy; hazardous materials compliance; aesthetics; and cultural resources.

Environmental element(s) that were determined not to be significantly affected by the proposed project and, therefore, do not require evaluation in the EIR, per Section 15063(c) of the State CEQA Guidelines (as amended), were as follows:

- Biological Resources. Due to the developed character of the project area, the potential for sensitive plant and/or animal species to inhabit the site or surrounding area is considered highly unlikely; therefore, this EIR will not address the issue of biological resources.

1.3 COMPONENTS OF THE EIR ANALYSIS

The analysis of each environmental category within Section 5, Environmental Conditions, Environmental Impacts, Cumulative Impacts, Mitigation Measures, and Significant Unavoidable Adverse Impacts, of this EIR is organized into the following subsections:

- "Environmental Conditions" describes the physical conditions that exist at this time and which may influence or affect the issue under investigation.

- "Environmental Impacts" describes the potential environmental changes to the existing physical conditions that may occur if the proposed project is implemented.
- "Cumulative Impacts" describes the potential environmental changes to the existing physical conditions that may occur with the proposed project, together with all other reasonably foreseeable, planned, and approved future projects.
- "Mitigation Measures" are those specific measures that may be required of the project by the decision makers in order to (1) avoid an impact, (2) minimize an impact, (3) rectify an impact by restoration, (4) reduce or eliminate an impact over time by preservation and maintenance operations, or (5) compensate for the impact by replacing or providing substitute resources or environment.
- "Significant Unavoidable Adverse Impacts" are identified where mitigation is not expected to reduce the project impacts to insignificant levels.

1.4 PROJECT SPONSORS AND CONTACT PERSONS

The City of Anaheim is the lead agency in the preparation of this EIR. Michael Brandman Associates is the environmental consultant to the City for the project. Preparers of this EIR are provided in Section 10. Key contact persons are as follows:

Lead Agency	City of Anaheim Planning Department Greg McCafferty, Associate Planner 200 South Anaheim Boulevard P.O. Box 3222 Anaheim, CA 92803
Environmental Consultant	Michael Brandman Associates Joan Patronite Kelly, AICP 17310 Red Hill Avenue, Suite 250 Irvine, CA 92714

1.5 REVIEW OF DRAFT EIR

This draft EIR was distributed to responsible and trustee agencies and surrounding cities. The draft EIR will be available for purchase by all interested parties in accordance with Public Resources Code 21092(b)(3) at the City of Anaheim Planning Department. In addition, during the 45-day public review period, the EIR, including the technical appendices, is available for review at the City of Anaheim, 200 South Anaheim Boulevard and at the following libraries: Canyon Hills Branch Library,

Euclid Branch Library, Haskett Reading Center, and Sunkist Branch Library. The Notice of the Completion of the draft EIR was also distributed as required by CEQA.

Written comments on the draft EIR should be addressed to:

City of Anaheim
Planning Department
200 South Anaheim Boulevard
P.O. Box 3222
Anaheim, CA 92803
Attn: Greg McCafferty, Associate Planner

Upon completion of the 45-day public review period, written response to all significant environmental issues raised will be prepared and available for review at least 10 days prior to the Planning Commission public hearing at which certification of the final EIR will be considered. These environmental comments and their responses will be included as part of the environmental record for consideration by decision makers for the project.

1.6 RELATED ENVIRONMENTAL DOCUMENTS

A number of adopted environmental and planning documents that were prepared for development projects (e.g., Anaheim Stadium Business Center, etc.) within the vicinity of the project site, in addition to those prepared for the previous expansion of Anaheim Stadium were used in the preparation of this EIR. These documents are hereby incorporated by reference and can be reviewed at the City of Anaheim, Planning Department.

SECTION 2

EXECUTIVE SUMMARY

2.1 INTRODUCTION

The proposed Anaheim Sports Center encompasses approximately 167 acres and is located within central Orange County in the southern portion of the City of Anaheim. The proposed project encompasses the existing Anaheim Stadium site and the property at the southeastern corner of Katella Avenue and State College Boulevard. The site is situated directly adjacent to the Santa Ana River and State Route (SR) 57 (Orange Freeway) to the east and the Metrolink commuter rail/Amtrak rail line and Katella Avenue to the north. State College Boulevard and Orangewood Avenue extend along the western and southern boundaries of the project site, respectively. Additionally, the Santa Ana Freeway (I-5) is located approximately 0.5-mile to the southwest of the site. The site is accessible by all of these surrounding roadways, including the main entrance located directly west of the site along State College Boulevard at Gene Autry Way. The project is generally bounded by office/professional and light industrial uses to the north, south, and west. Commercial/retail (restaurants, motels, etc.) are also located to the west as well as to the east (fitness club, sporting goods store, etc.). The Arrowhead Pond of Anaheim is also located approximately 0.5-mile to the northeast of the project site along Katella Avenue.

The Anaheim Sports Center is proposed to provide land use planning and zoning for the existing Anaheim Stadium site. The plan for the project will provide the City of Anaheim with an effective tool for the implementation of General Plan goals and policies and priorities on the Anaheim Sports Center site. The goal of the project is to provide for the economic development and enhancement of the Anaheim Sports Center site as Commercial Recreation by setting forth refined design guidelines and development standards for the site. The Anaheim Sports Center will permit the renovation of the existing Anaheim Stadium and reconfiguration of the 16,000 space parking area, construction of a new stadium (i.e., 45,000 or 70,500 seats), and complimentary uses (retail/entertainment, office, hotels, etc.)

In order to further implement the economic development and enhancement goals with regard to the greater Stadium Area, the City Council on January 9, 1996, directed City staff to prepare a Master Land Use Plan (MLUP) and Master Environmental Impact Report (MEIR) encompassing approximately 807 acres. This study effort will result in completion of planning documents that will guide development through development standards and design guidelines. The plan will include a master landscape plan, streetscape program, identity program, public facilities plan, and detailed zoning and development standards. The proposed MLUP is a separate project from the Sports Center

plan, and will be comprehensively evaluated in another EIR and subject to environmental review under CEQA. Apart from the streetscape and identity programs, and certain public improvements, the MLUP will not provide for any specific development projects; rather, it is intended to provide guidance for consistency in future proposals through comprehensive planning.

At the time the Sports Center EIR was circulated for public review, the planning process for the larger Stadium Area had not yet begun. Upon initiation, it will take several weeks before proposed land use alternatives are at a level of detail suitable for analysis of environmental impacts and therefore, too speculative for environmental review. However, analysis of cumulative impacts will be addressed during preparation of the MEIR for the larger Stadium Area.

2.2 PROJECT DESCRIPTION

The EIR assesses the potential individual and cumulative impacts created by the development of the Anaheim Sports Center site along with the renovation of the existing Anaheim Stadium, reconfiguration of the existing 16,000-space parking area to include 14,000 onsite spaces, offsite parking to accommodate major sporting events, construction of a new stadium (i.e., 45,000 or 70,500 seats), and complementary land uses consisting of retail/entertainment, office, continuing exhibition activities, two hotels, and a youth sports center.

Development of the site will require an amendment to the City of Anaheim General Plan Land Use Element and a zone change. The existing General Plan Land Use Element designations for the site are Commercial Recreation and Business Office/Service/Industrial. The proposed land use designation for the entire site will be Commercial Recreation. The existing zoning for the site is PR, Public Recreational, CO, Commercial, Office and Professional, and ML, Limited Industrial. The proposed zoning designation for the entire site will be PR, Public Recreational. Both proposed land use and zoning designation will allow for the development of the Anaheim Sports Center site in conformance with the General Plan.

2.3 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

The EIR addresses the areas of controversy and issues which required resolution that were known to the City of Anaheim or were raised by agencies and the public during the scoping process. Many of these were identified during the NOP process, as described previously. The following summarizes the primary areas of controversy related to environmental effects which were raised during the public scoping process and the section of the EIR in which these issue are addressed:

- Project compatibility with surrounding land uses (Section 5.1, Land Use and Related Planning Programs).
- Area traffic impacts and project traffic on local streets and parking conditions (Section 5.2, Transportation and Circulation).
- Air quality impacts (Section 5.3, Air Quality)
- Noise from project-related traffic (Section 5.4, Noise).
- Effects on water quality and supply (Section 5.6, Hydrology and Water Quality)
- Effects on population and employment (Section 5.7, Employment, Population, and Housing)
- Public Services and Utilities (Section 5.8, Public Services, Utilities, and Energy Consumption).

The issues to be resolved by the City of Anaheim include the choice among alternatives, including the proposed project, and whether or how to mitigate the environmental effects of the proposed project.

2.4 SUMMARY OF ALTERNATIVES

The City of Anaheim has analyzed various alternatives to the proposed project to evaluate the opportunity for avoiding or substantially lessening environmental impacts. Section 6, Alternatives, provides detailed descriptions and analysis of each alternative in adequate detail to allow the decision maker to decide whether or not an alternative should be adopted in lieu of the proposed project as well as analysis of the environmentally superior alternative.

Section 15126(d) of the CEQA Guidelines requires that an EIR "describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain most of the basic objectives of the project, and evaluate the comparative merits of the alternatives" but would avoid or substantially lessen any of the significant effects of the project.

For the Anaheim Sports Center EIR, an analysis of alternative location(s) was not pursued because such an alternative would not attain the basic objectives of the project. More specifically, the Anaheim Stadium area has been designated by the City of Anaheim as the project site with the intent to enhance existing onsite uses and develop additional complementary uses within the project area. The City's General Plan currently designates the project site for Commercial Recreation land uses in recognition of the desire to enhance the site and continue such uses in the City's long-term growth plans.

It is important to note that the proposed project, as addressed in the EIR, is a planning program particular to a geographic area. As such, it is contrary to the basic nature and objective of the project to consider applying the proposed Anaheim Sports Center to an alternate location.

This EIR includes an evaluation of the following land use alternatives to the proposed Anaheim Sports Center project:

- No Project
- Design Alternative 1: Reduced Density Alternative
- Design Alternative 2: Residential Alternative

The following summarizes the alternatives considered in detail in Section 6, Alternatives, of this EIR.

NO PROJECT ALTERNATIVE

The No Project Alternative assumes that future development of the proposed Anaheim Sports Center site would occur under the assumptions established in the City of Anaheim General Plan. The current General Plan Land Use designations for the site are Commercial Recreation and Business Office/Service/Industrial. A previously entitled project, the Orangewood Site Master Plan, would have allowed an additional 2,118,480 square feet of commercial/office space, accessory retail and four parking structures (2,587,000 square feet) to be developed in the southern portion of the site along Orangewood Avenue, as described in the Anaheim Stadium Center Final EIR. The remainder of the site would continue in its current use (Anaheim Stadium, parking, commercial/office professional uses).

DESIGN ALTERNATIVE 1: REDUCED DENSITY ALTERNATIVE

The reduced density alternative allows for the development of a new 45,000 seat baseball stadium, or a new 70,500 seat football stadium and renovated 45,000 seat Anaheim Stadium to be used solely for baseball, 300,000 square feet of retail/entertainment, two hotels (500 rooms), 100,000 square feet of exhibition space, 900,000 square feet of office space, and 16,000 onsite parking spaces. This alternative provides for a reduction of approximately 450,000 square feet in retail/entertainment uses, in addition to reducing the amount of exhibition space currently onsite by 50,000 square feet. However, this alternative would provide approximately 2,000 more parking spaces onsite than what would occur under the project. The addition of these spaces would eliminate the need for a shuttle to carry visitors from offsite parking locations to the site, thereby decreasing the amount of traffic on the surrounding circulation system during major event times. The general intent of this alternative

is to reduce the overall impact of the development of the site, while still creating a feasible alternative to the project.

DESIGN ALTERNATIVE 2: RESIDENTIAL ALTERNATIVE

The residential alternative would eliminate approximately 450,000 square feet of office/professional space and allow for the development of 360 apartment/condominium type units. The residences would be located in place of one of the office towers proposed for the Anaheim Sports Center in the northern portion of the site. The intent of this alternative would be to reduce air quality and socioeconomic impacts associated with the proposed project which will decrease the amount of vehicle miles travelled and vehicle trips generated by those employees that would commute from other areas of the County to work onsite. This alternative assumes all other uses proposed under the project would be implemented (e.g., new stadium, hotels, exhibition space, etc.), in addition to the development of 14,000 onsite parking spaces.

2.5 MITIGATION MONITORING PROGRAM

CEQA requires public agencies to set up monitoring or reporting programs for the purpose of ensuring compliance with those mitigation measures adopted as conditions of project approval in order to mitigate or avoid significant environmental effects identified in environmental impact reports. A mitigation monitoring program, incorporating the mitigation measures set forth in this document, will be adopted at the time of certification of the EIR.

2.6 SUMMARY OF SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A detailed discussion and analysis of project impacts and recommended mitigation measures is presented in Section 5, Environmental Conditions, Environmental Impacts, Cumulative Impacts, Mitigation Measures, and Significant Unavoidable Adverse Impacts. However, there are some project-related impacts that are unavoidable and cannot be mitigated to a less than significant level. These impacts will remain significant after mitigation and are briefly summarized below:

- Air Quality: Implementation of the proposed project would result in significant, unavoidable short-term construction impacts on particulate matter (PM10) emissions, and significant, unavoidable long-term regional air quality impacts on carbon monoxide (CO), nitrogen oxides (NOx), and reactive organic compounds (ROC).

- Schools: Projected project fees will not cover the cost to the school districts associated with new students.
- Solid Waste: Because of limited landfill capacity, the impact to landfill capacity is expected to remain significant.

Additionally, the following significant cumulative impacts have been identified:

- Cumulative air quality impacts related to CO, NOx, and ROC which will exceed SCAQMD significance thresholds.
- Solid waste impacts because of limited landfill capacity.

SECTION 3

PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The proposed Anaheim Sports Center site is located in the City of Anaheim, approximately 35 miles southeast of downtown Los Angeles and directly adjacent to the City of Orange to the north and east, in central Orange County. The regional setting of the project is shown on Exhibit 3-1. The project site is located northeast of the Interstate 5 (I-5) corridor, east of State College Boulevard, south of Katella Avenue, west of the Santa Ana River and State Route (SR) 57 (Orange Freeway), and north of Orangewood Avenue. Regional access to the project vicinity is provided primarily via I-5 and SR-57 via State College Boulevard and Katella Avenue. Local access to the site is provided via Gene Autry Way, Douglass Road, State College Boulevard, Katella Avenue, and Orangewood Avenue. The local vicinity is shown on Exhibit 3-2.

3.2 SITE CHARACTERISTICS

The Anaheim Sports Center site is located within the Anaheim Stadium Industrial Area and is designated as Commercial Recreation and Business Office/Service/Industrial by the City's General Plan. The site is situated on 167 acres, approximately 159 acres of the existing Anaheim Stadium property and approximately 8 acres at the southeast corner of Katella Avenue and State College Boulevard not currently part of the stadium property. The Anaheim Stadium property is also within a redevelopment project area. The Anaheim Sports Center site, which is the subject of this EIR, is currently zoned PR, Public Recreational; ML, Limited Industrial; and CO, Commercial, Office and Professional. The site is currently occupied by the existing Anaheim Stadium, 16,000 parking spaces, and a Metrolink commuter rail/Amtrak station. Approximately 8 acres of existing commercial (McDonalds, etc.) and office/professional uses are located in the northwestern portion of the Anaheim Sports Center site. As indicated previously, an underground storm-drain channel (Southeast Anaheim Channel facility) extends through the western portion of the site in a north/south direction.

Surrounding land uses include a mix of office/professional, commercial, retail, and industrial uses. Recreational type uses are also located directly adjacent to the site in the form of bicycling and hiking trails along the Santa Ana River. A more detailed discussion of surrounding land uses is provided in Section 5.1, Land Use and Related Planning Programs.

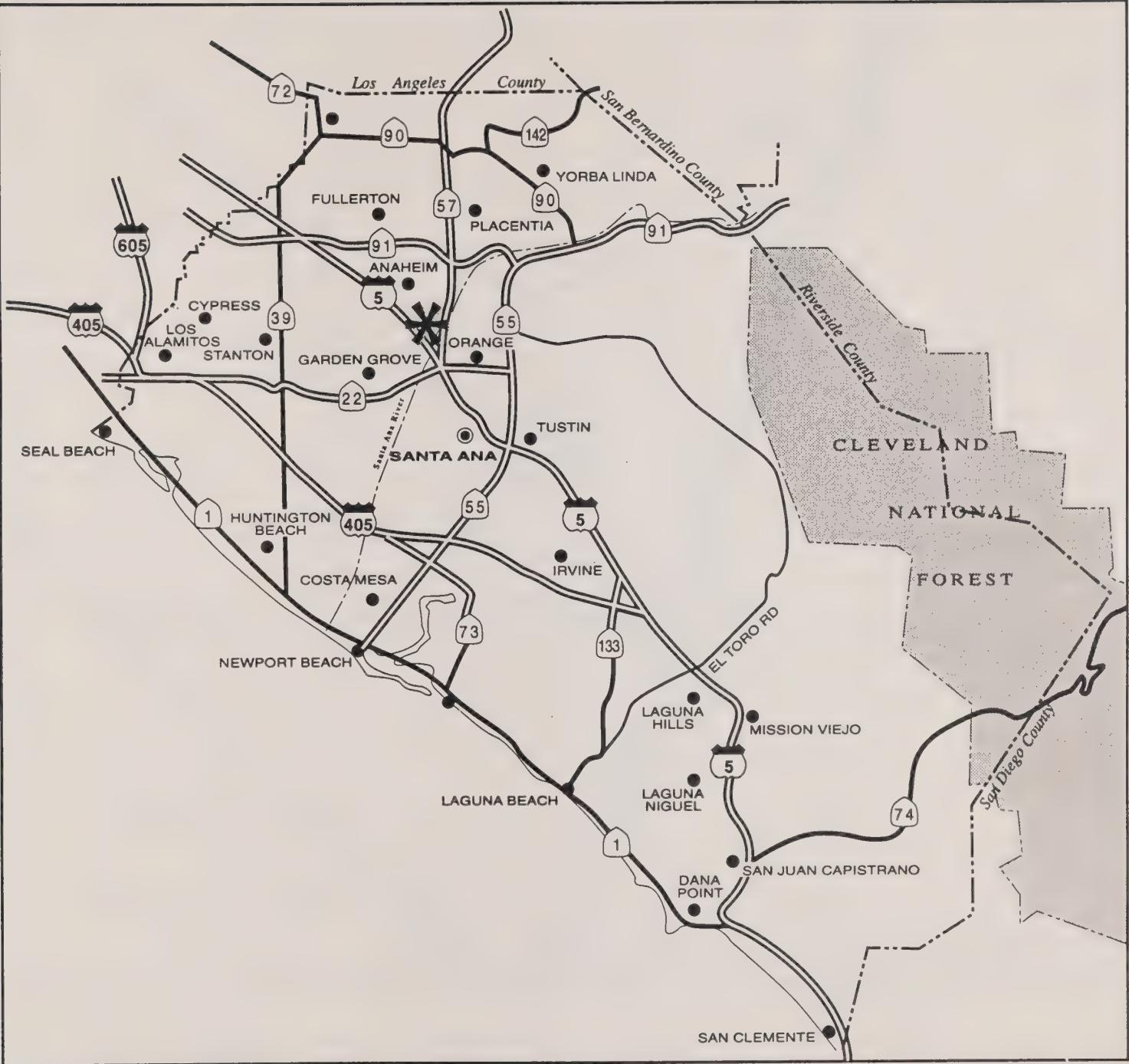
3.3 PROJECT OBJECTIVES

The City of Anaheim has established development objectives relative to the proposed project intended to set the framework and criteria for development of the Anaheim Sports Center site and surrounding area. The City's overall objective for the project is to establish a plan for the economic development and enhancement of the Anaheim Stadium property. Following are the City's specific objectives which guided the formulation and characteristics of the Anaheim Sports Center site.

- Enhance the City's sports venues to maintain existing tenant relationships and attract additional professional sports teams and other major events.
- Develop an entertainment/recreation area for the local and regional residents, while providing entertainment opportunities for convention visitors and tourists from outside the project area.
- Provide a variety of entertainment venues at one location, with an emphasis on pre- and post-game retail and entertainment opportunities.
- Increase sales tax yields and other City income opportunities to further enhance the economic base of the community.
- Enhance the Anaheim Stadium and surrounding property through reinvestment in development and infrastructure.
- Encourage and enhance Anaheim's and the County of Orange's position as a nationally recognized visitor destination, while maintaining the attraction of Anaheim's highly rated Convention Center.
- Maintain the integrity of the City areas designated for Commercial Recreation uses by permitting compatible land uses within the designated areas.
- Encourage the development of quality facilities which complement conventions, family entertainment, sports events, and other recreational opportunities within appropriate areas of the community.

3.4 PROJECT CHARACTERISTICS

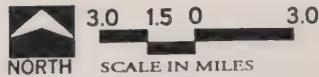
The proposed project would include the renovation of the existing Anaheim Stadium, construction of a new stadium, reconfiguration of the existing 16,000-space parking area to 14,000 onsite parking spaces, and complementary land uses comprised of retail/entertainment, office/professional, hotels, and exhibition space. The project also assumes that additional parking spaces would be used at offsite location(s), such as office parking structures, the Arrowhead Pond of Anaheim, etc. to accommodate



LEGEND



Project Location



3.0 1.5 0 3.0

SCALE IN MILES

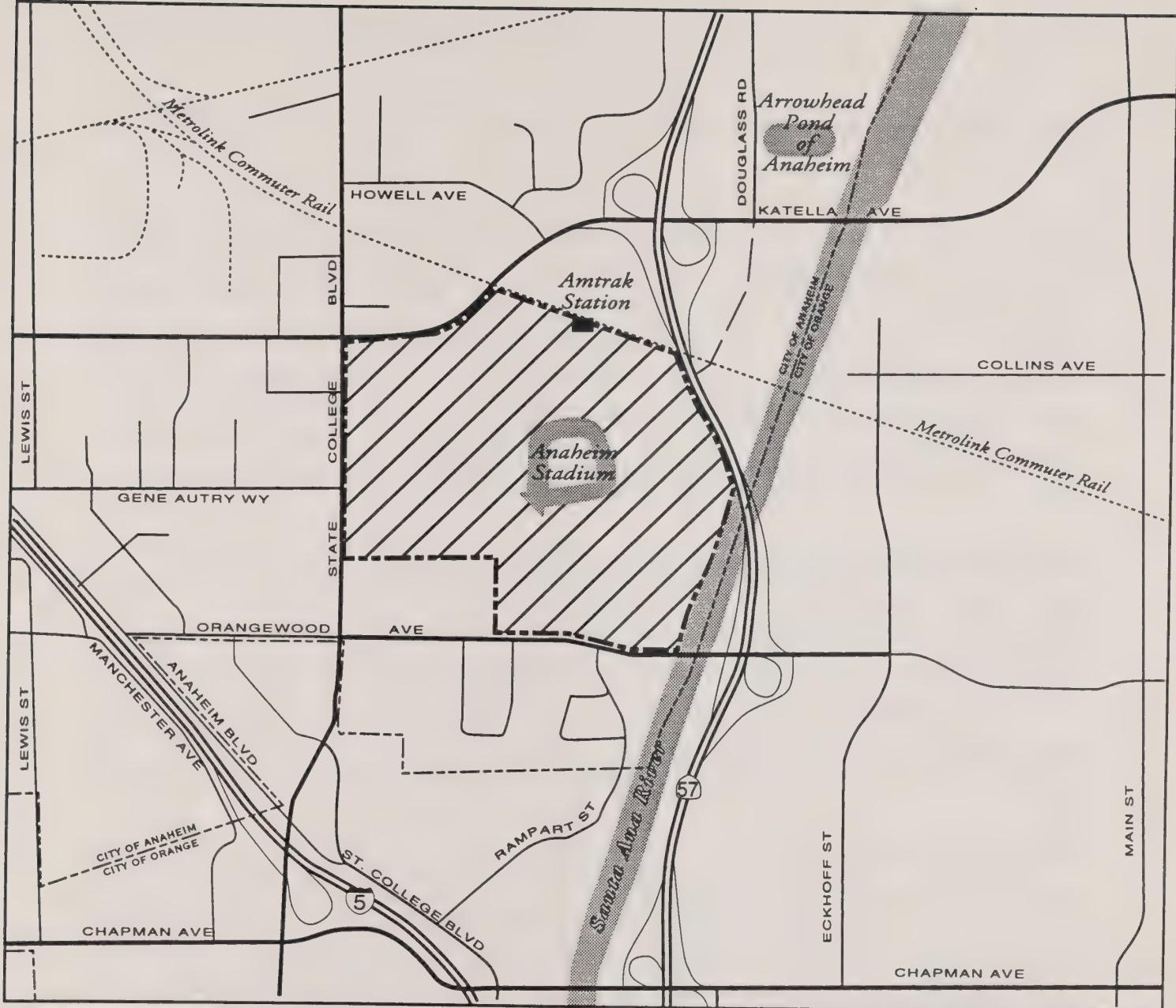


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exhibit 3-1
Regional Location Map

ANAHEIM SPORTS CENTER EIR



LEGEND



Project Site Location



2000' 1000' 0' 2000'



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exhibit 3-2
Project Vicinity Map

ANAHEIM SPORTS CENTER EIR

traffic during major sporting events. The locations of proposed land uses are conceptually shown in Exhibit 3-3.

Under the proposed plan there will be a 70,500 seat football stadium (equal to the current seating capacity for a football game at the Anaheim Stadium) and a 45,000 seat baseball stadium. The existing Anaheim Stadium will be renovated for the primary use of professional football games with 70,500 seats or for major league baseball games with 45,000 seats (as well as for other non-professional league major events). The new stadium will also either be developed for football (70,500 seats) or for baseball. A determination has not yet been made which stadium will be used for which sport. For CEQA purposes, there is no difference in the impacts associated with the decision of which stadium serves which purpose because the total seating capacity remains constant.

The project is intended to provide linkage between the existing Anaheim Stadium, the proposed stadium, The Arrowhead Pond of Anaheim, the Metrolink commuter rail/Amtrak station, and the surrounding area. As part of the project, circulation and design linkages would be created between the Anaheim Sports Center and the Anaheim Resort, which includes the Anaheim Convention Center and the Disneyland area. In addition, optimum vehicular and pedestrian circulation patterns will be developed, design guidelines will be developed for the retail/entertainment uses, and comprehensive landscape and graphic design elements will be created for both public and private spaces onsite.

The project site plan, Exhibit 3-3, depicts a ring-road that extends around Anaheim Stadium. This feature is planned as the hub of the site's primary circulation system. The main entrance to Anaheim Sports Center will be on the west side of the project area from State College Boulevard along Gene Autry Way. A second entrance will be located on the north side of Orangewood Avenue west of SR-57. A third access point will be from the north along Gene Autry East (currently Douglass Road) under SR-57 into the Anaheim Sports Center. The fourth vehicular access point is planned for the south side of Katella Avenue just south of the Metrolink commuter rail line. All entrances will intersect the ring-road that will extend around the Anaheim Stadium.

A major goal of the proposed project is for the Anaheim Sports Center to be identified as an entertainment destination enhancing the variety of options available in the Anaheim Resort. It is also envisioned that many visitors that attend a major sporting event, such as a baseball or football game, will patronize one of the many dining opportunities available at the Anaheim Sports Center prior to the game itself. Additionally, these same visitors will be afforded the opportunity to shop, frequent a sports bar or nightclub, or even use a world-class training facility prior to returning to their automobiles. These project features provide an added benefit related to traffic and circulation by

indirectly regulating the incoming and outgoing traffic over a much larger span of time to increase speed of parking and departure.

The proposed project will also serve the retail, dining, and entertainment needs of the local Orange County residents.

As indicated previously, the site encompasses approximately 8 acres of commercial and office/professional-type land uses at the southeast corner of State College Boulevard and Katella Avenue. Implementation of the proposed project would require the relocation of businesses and acquisition of this property through negotiation or other lawful means; demolition and site clearance activities; environmental investigation; and remedial activities.

3.5 PROJECT FEATURES

The proposed Anaheim Sports Center is a compilation of many project components. Table 3-1, Project Components, lists the individual components of the proposed project.

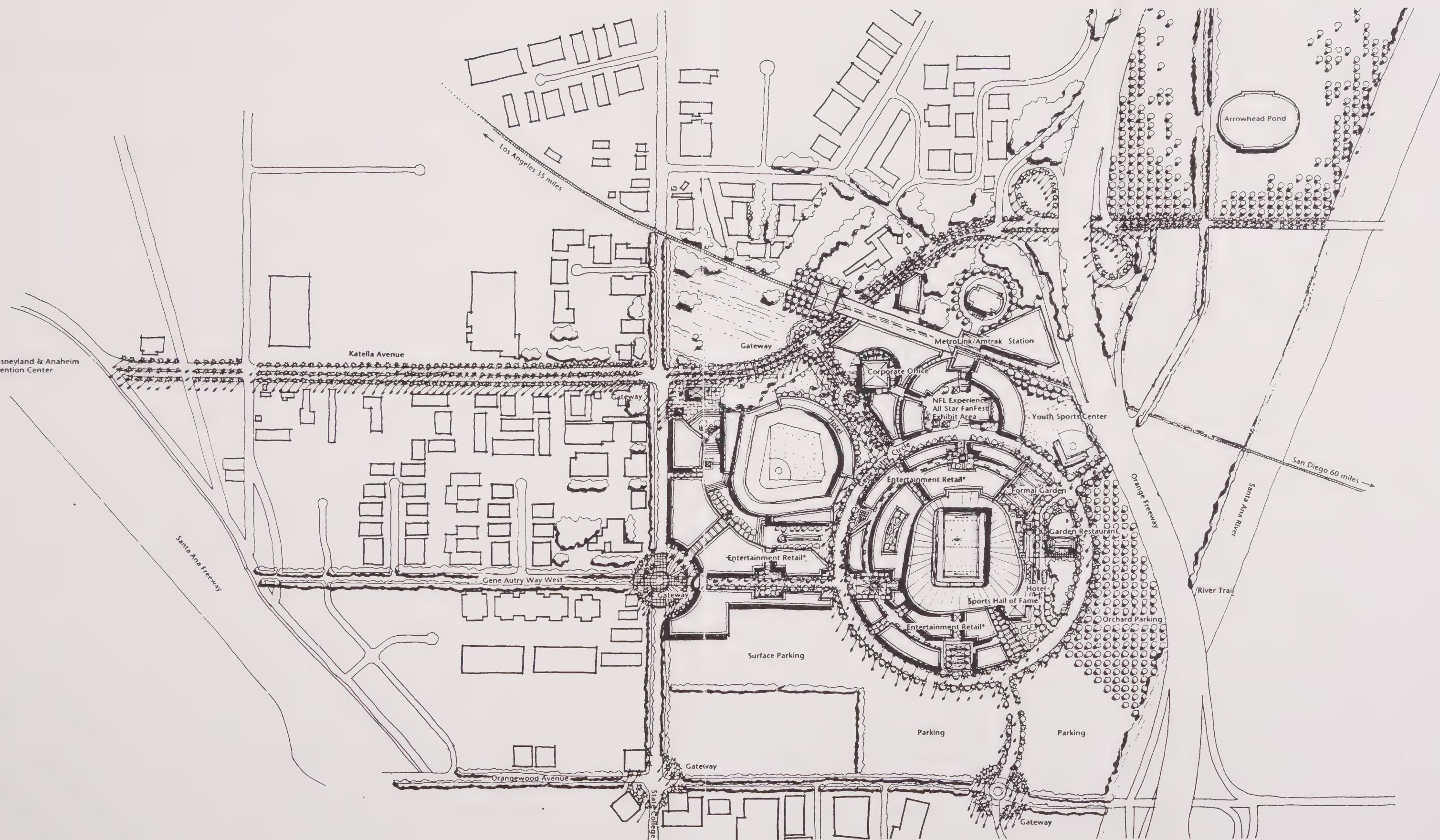
TABLE 3-1
PROJECT COMPONENTS

Component	Capacity ^a
New and Renovated Stadiums	45,000 seats
Youth Sports Center/Stadium	750 seats
Urban Entertainment/Retail	750,000 sq. ft.
Hotel 1 - 350 rooms	385,000 sq. ft.
Hotel 2 - 150 rooms	165,000 sq. ft.
Exhibition Center	150,000 sq. ft.
Office	900,000 sq. ft.
Parking	
Onsite Offsite	14,000 spaces 8,000 spaces ^b

^a The numbers in this column represent the capacity that will be added to the existing uses at Anaheim Stadium in square feet, seats, and parking spaces.

^b Approximate parking being added as a resource to the project, but currently exists offsite.

Source: The Jerde Partnership, June 1995.



Source: The SWA Group, July 1995.



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exhibit 3-3
Project Site Plan

ANAHEIM SPORTS CENTER EIR

STADIUM

There are three distinct stadiums planned within the Anaheim Sports Center, as depicted on Exhibit 3-3, Project Site Plan. The new stadium is proposed to be located northwest of the existing Anaheim Stadium. This stadium is depicted as facing to the northeast. The existing Anaheim Stadium is proposed for modernization and renovation (versus the existing baseball/football combination) with seating for 70,500 or 45,000 visitors, respectively. The third stadium is proposed as part of a Youth Sports Center complex located just south of the SCRRRA Metrolink line and west of SR-57. This facility is planned to be used for tournament and championship games associated with youth sporting leagues (such as Little League) in the area, in addition to special regional play. Start times for games/events in the Anaheim Stadium, the new stadium, the exhibition center, and The Pond would be scheduled appropriately to avoid traffic and parking conflicts. There will not be games concurrently at the two major stadiums planned for the project site.

URBAN ENTERTAINMENT/RETAIL

The entertainment and retail component of the project is proposed to encompass the north, west, and south sides of the existing Anaheim Stadium, as well as at the main entrance to the project site along Gene Autry Way. Additional entertainment and retail uses will be located to the north of Gene Autry Way along the east side of State College Boulevard. The conceptual uses and the maximum square footage ranges for each category of entertainment/retail are shown on Table 3-2, Entertainment and Retail Uses - Conceptual Program.

As shown on Table 3-2, the maximum amount square footage for each of the categories are provided. These numbers are a maximum amount that could be developed under each category. The "total" amount of square footage, as identified in Table 3-2 would not be allowed to be implemented on site in its entirety because it would cumulatively provide for approximately 995,000 square feet of urban entertainment/retail space, which is approximately 245,000 more square feet than proposed under this project. Rather, the project would provide a variety of these uses allowing for up to 750,000 square feet of urban entertainment/retail-type uses. For example, the project could provide for 356,000 square feet of retail and 204,500 square feet of food and beverage. So as not to exceed the project's proposal of 750,000 square feet of urban entertainment/retail, these uses could be combined with other uses listed in Table 3-2, such as 189,500 square feet of sports facilities/centers or 90,000 square feet of film-based entertainment and 99,500 square feet of general entertainment and attractions. Basically, any combination of urban entertainment/retail uses, not exceeding their designated total (see Table 3-2) but totalling 750,000 square feet or less would be allowed for development on the project site.

TABLE 3-2
ENTERTAINMENT AND RETAIL USES - CONCEPTUAL PROGRAM

Program Uses	Maximum Square Feet Within Each Category
Retail	356,000
Food And Beverage	204,500
Sports Facilities/Centers	200,000
Film-Based Entertainment	90,000
General Entertainment and Attractions	124,000
Miscellaneous	20,000
Total Square Footage of Entertainment/Retail	750,000 ^a

^a This figure represents the maximum total square footage allowed onsite for entertainment and retail uses and is not a sum of the maximums, as identified, within each use category.

Source: The Jerde Partnership, June 1995.

HOTEL

There are two hotels planned within the Anaheim Sports Center. A 350-room hotel is planned to be located directly adjacent to the outfield area of the proposed stadium. There will be views of the stadium from the hotel with a location proximate to the office towers, exhibition space, and entertainment/retail components. The second hotel consists of 150 rooms and is planned in a location just east of the existing Anaheim Stadium, directly adjacent to entertainment/retail uses which will wrap the other three sides of the stadium. Similar to the 350-room hotel, this hotel will have views into the stadium.

EXHIBITION AREA

The exhibition area is a use that is proposed to be continued within the project site. Currently, there is approximately 50,000 square feet of space used for exhibition activities located under a portion of the existing Anaheim Stadium seating area. An additional 100,000 square feet of exhibition space is currently accommodated in temporary structures north of Anaheim Stadium in the parking area. The 50,000 square feet of exhibition space under the existing stadium will continue to be used, while the

remaining 100,000 square feet will be housed in permanent structures located to the north of the existing stadium. The proposed exhibition space is also envisioned to be used for special visitor accommodations associated with major stadium events. Examples of such events are the NFL Experience associated with the National Football League's Superbowl game and the All-Star FanFest associated with major league baseball's All-Star Game. With the exception these major stadium-related activities, the use of the exhibition space will be limited to those times in which stadium sporting events are not occurring. The exhibition area will be located just north of Anaheim Stadium.

OFFICE

There are two office towers planned within the project site. Both are proposed to be located north of the existing Anaheim Stadium, just south of the Metrolink commuter rail line. The office towers will be a maximum of 320 feet and 30 stories high, with a combined area of 900,000 square feet. Although the office use is envisioned to be primarily in the two office towers, there is a potential for some small office uses to be located within the retail complex; however, the aggregate of office area will not exceed 900,000 square feet.

PARKING

The parking for the Anaheim Sports Center is planned to be accommodated with 5,600 spaces of two-level structured parking under the entertainment/retail uses that would extend around the perimeter of the existing Anaheim Stadium; 3,500 spaces in one-level structured parking north, northeast, and south of the proposed stadium; and 4,900 spaces of surface parking located south and east of Anaheim Stadium. The parking area adjacent to SR-57 just east of Anaheim Stadium is planned as orchard parking. This area would be surfaced with a pervious material to allow grass and/or other groundcover to grow around a series of trees. In addition, offsite parking will be made available (see Section 5.2, Transportation and Circulation, for further discussion), by private parking facilities (office parking structures, etc.), during major events at the Anaheim Sports Center. It is not yet known which of the offsite parking facilities that are located within the vicinity of the project site will be used. However, a shuttle is proposed to transport visitors to and from these facilities to the Anaheim Sports Center. The plan depicting the location of onsite parking is provided in Exhibit 3-4.

3.6

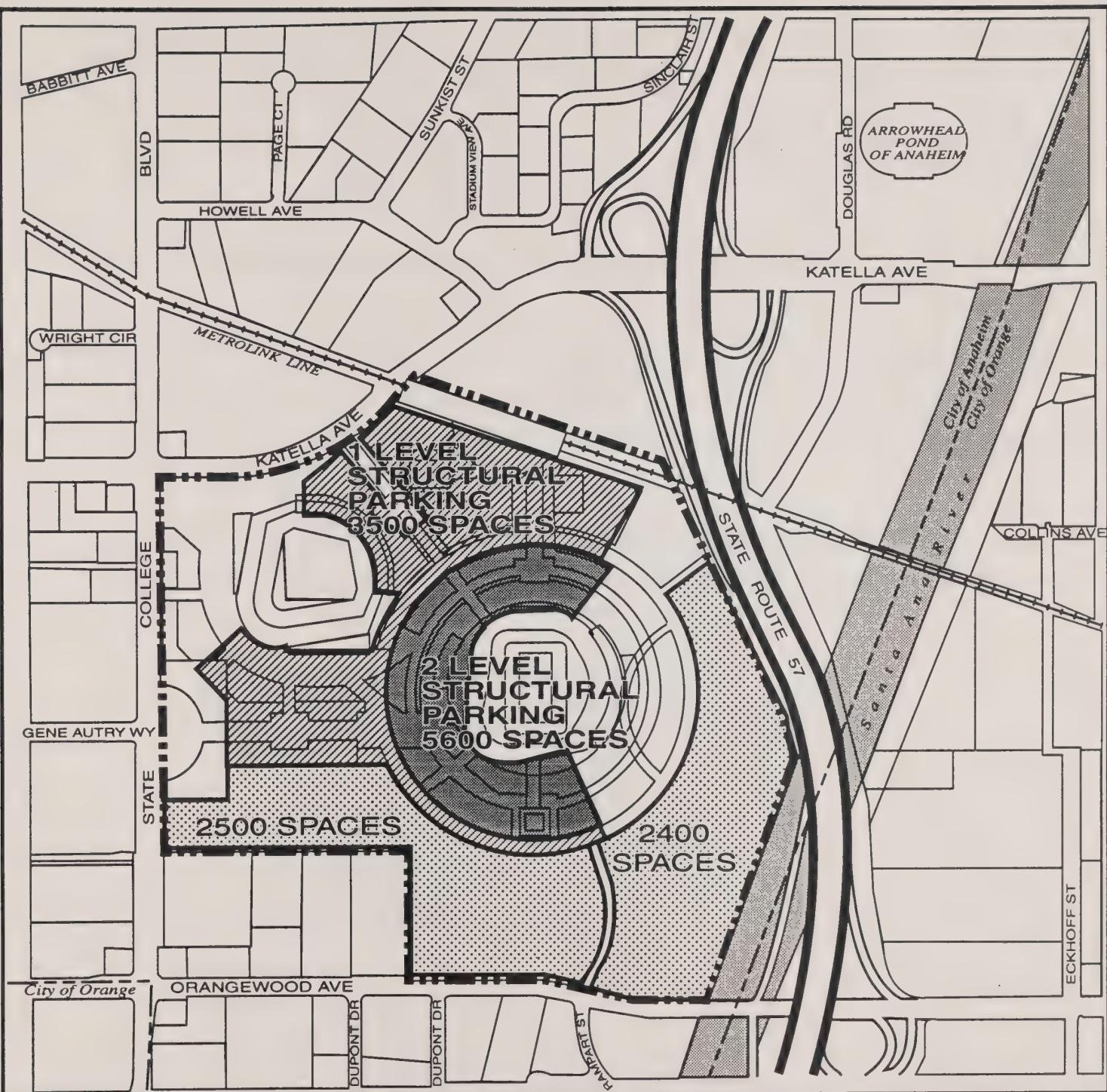
INTENDED USE OF THIS EIR, RESPONSIBLE AGENCIES, AND APPROVALS NEEDED

The EIR is being prepared by the City of Anaheim to assess the potential environmental impacts that may arise in connection with action related to future implementation of the Anaheim Sports Center. This EIR is a project EIR and will be the primary reference document in the formulation and implementation of a mitigation monitoring program for the project, as required by CEQA. This EIR is intended to cover all state and local governmental discretionary approvals that may be required to construct and implement the Anaheim Sports Center project, whether or not they are explicitly listed below.

Approvals by the City are required for implementation of the proposed project. Such discretionary actions include a General Plan Amendment to maintain consistency between land uses proposed under the project and the General Plan, zone change, conditional use permits, variances, and subdivision maps. Other actions could include infrastructure financing and maintenance programs, and other actions necessary to implement the project as identified later in the section under "Other Discretionary and Ministerial Actions."

The City of Anaheim is the lead agency for the project and has discretionary authority over the project and project approvals. The actions involved in the initial implementation of the proposed project, if approved, include the following:

- General Plan Amendment. An amendment to the City of Anaheim Land Use Element would be required for project implementation.
 - a. The majority of the site has a General Plan land use designation of Commercial Recreation, which would allow for the development of the Anaheim Sports Center project. However, implementation of the proposed land uses would require a change in land use designation for the parcels located in the northwestern portion of the site from Business Office/Service/Industrial to Commercial Recreation. The existing and proposed General Plan land use designations are depicted in Exhibits 3-5 and 3-6, respectively.
- Zone Change. Development of the project would require the rezoning of a portion of the project site.
 - a. A majority of the site is zoned (PR) Public Recreational and would allow for additional development at the Anaheim Sports Center. However, implementation of the project would require a change of zone for parcels located in the northwestern portion of the site from CO, Commercial, Office



LEGEND



Project Boundary



800' 400' 0' 800'

Source: The Jerde Partnership, July 1995.

exhibit 3-4 Proposed Parking Plan

ANAHEIM SPORTS CENTER EIR

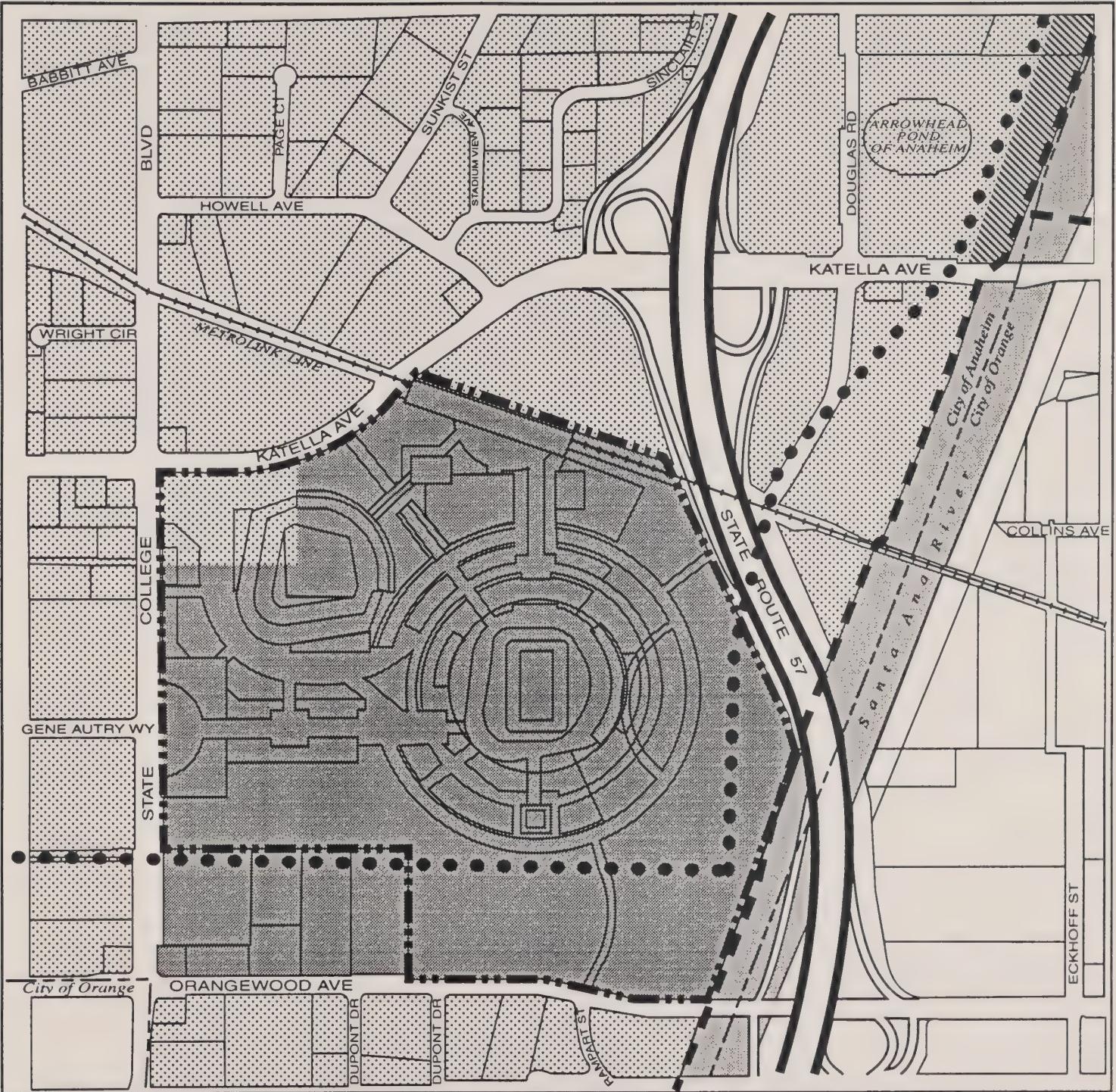
and Professional, and ML, Limited Industrial to PR, Public Recreational. The existing and proposed zoning designations for the site are depicted in Exhibits 3-7 and 3-8.

3.7 OTHER DISCRETIONARY AND MINISTERIAL ACTIONS

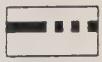
The project may also require one or more of the following approvals by the City of Anaheim and/or Anaheim Redevelopment Agency: financing mechanisms/agreements; owner participation agreements; disposition and development agreements; abandonment of streets or subsurface rights; building permits; demolition permits; grading permits; encroachment permits; property acquisition; relocation and other actions related to the implementation of the proposed project.

Other agencies with discretionary authority over some aspect of the project are defined in CEQA as responsible agencies (Section 15381 of the State CEQA Guidelines). Such agencies may also use this EIR in their consideration of the project. These agencies include, but are not limited to:

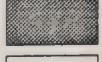
- California Department of Transportation (Caltrans)
- Orange County Environmental Management Agency
- Orange County Health Department
- Orange County Flood Control District
- Orange County Transportation Authority
- Regional Water Quality Control Board
- South Coast Air Quality Management District
- Southern California Association of Governments
- Anaheim Redevelopment Agency
- Anaheim Public Finance Authority



LEGEND



Project Boundary



Commercial Recreation



Riding & Hiking Trail



Powerline Easement



Business Office/Service/Industrial



General Open Space



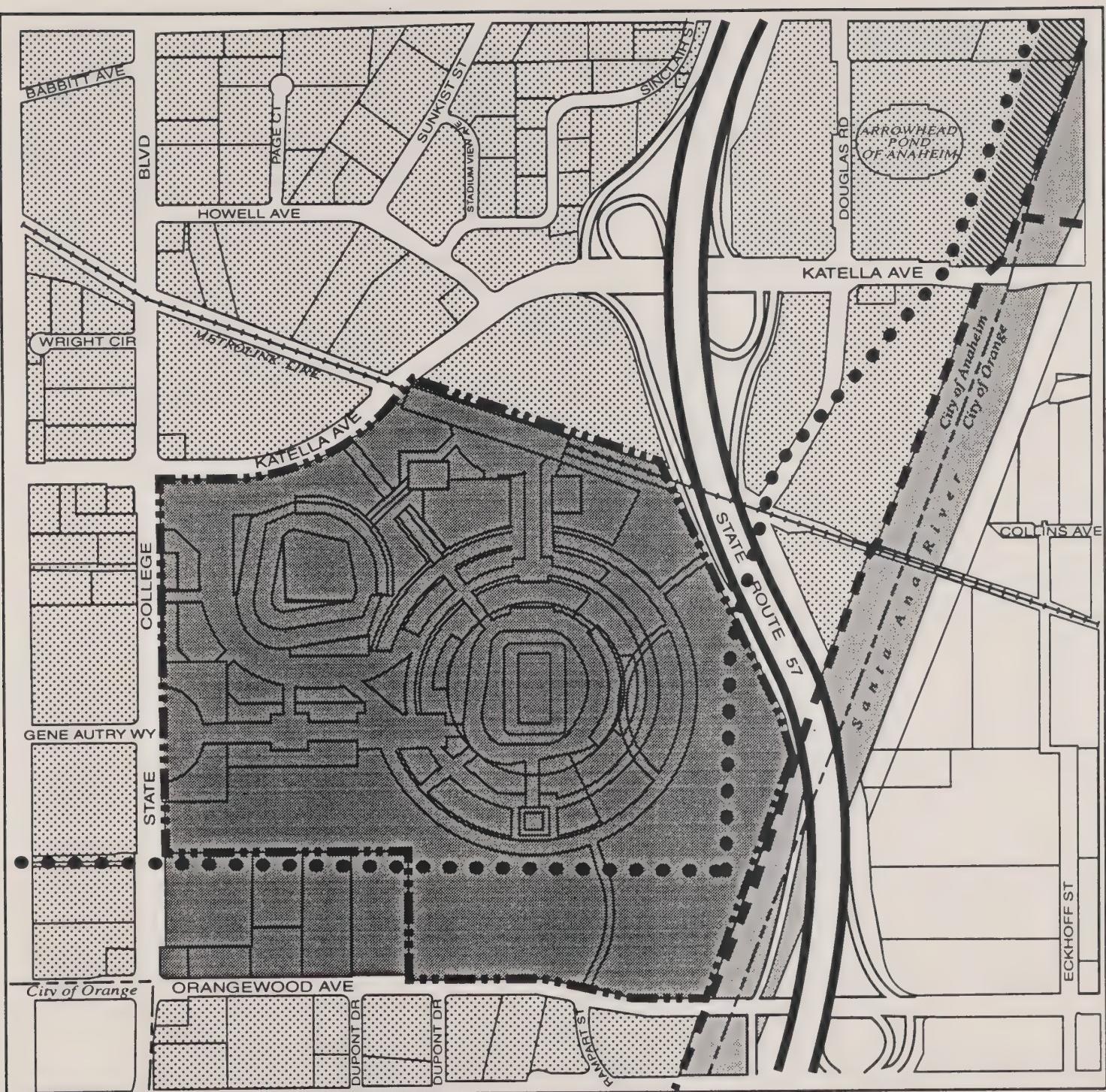
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Source: City of Anaheim, April 1991.

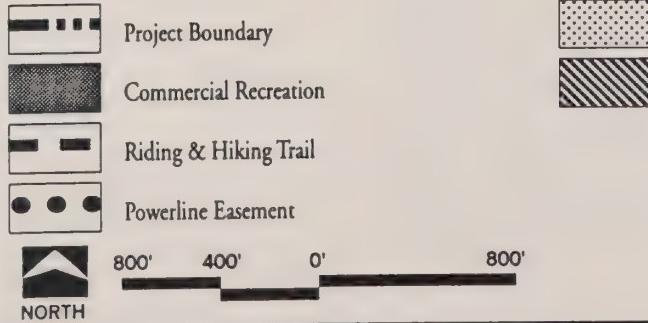
exhibit 3-5

Existing General Plan Land Use Designations

ANAHEIM SPORTS CENTER EIR



LEGEND



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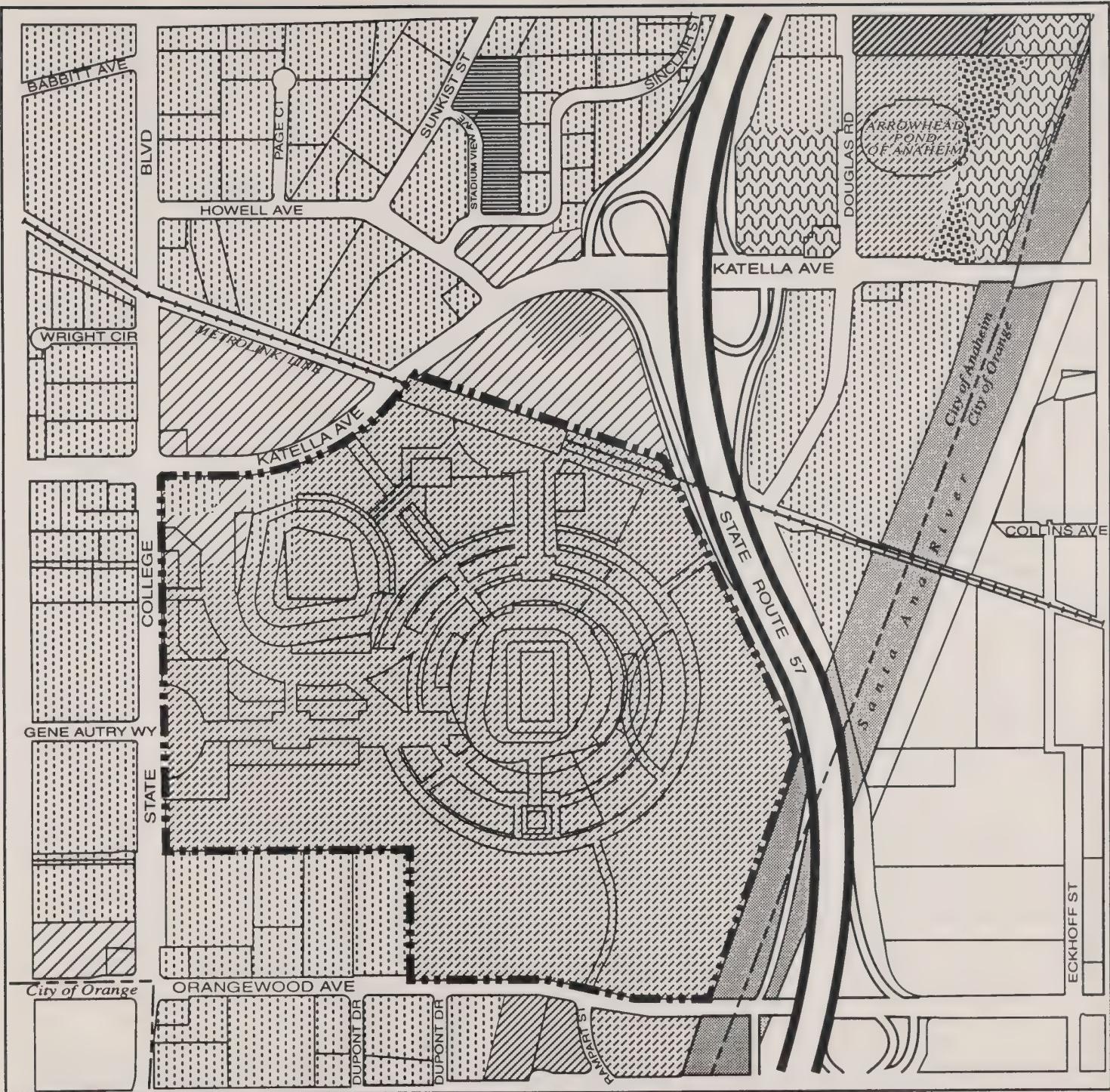
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Source: The SWA Group, July 1995.

exhibit 3-6

Proposed General Plan Land Use Designations

ANAHEIM SPORTS CENTER EIR



LEGEND

	Project Boundary
	Industrial, Heavy
	Industrial, Limited
	Commercial, Heavy
	Commercial, Limited
	Commercial, Office & Professional
	Residential/Agricultural
	Public Recreational

800'

400'

0'

800'



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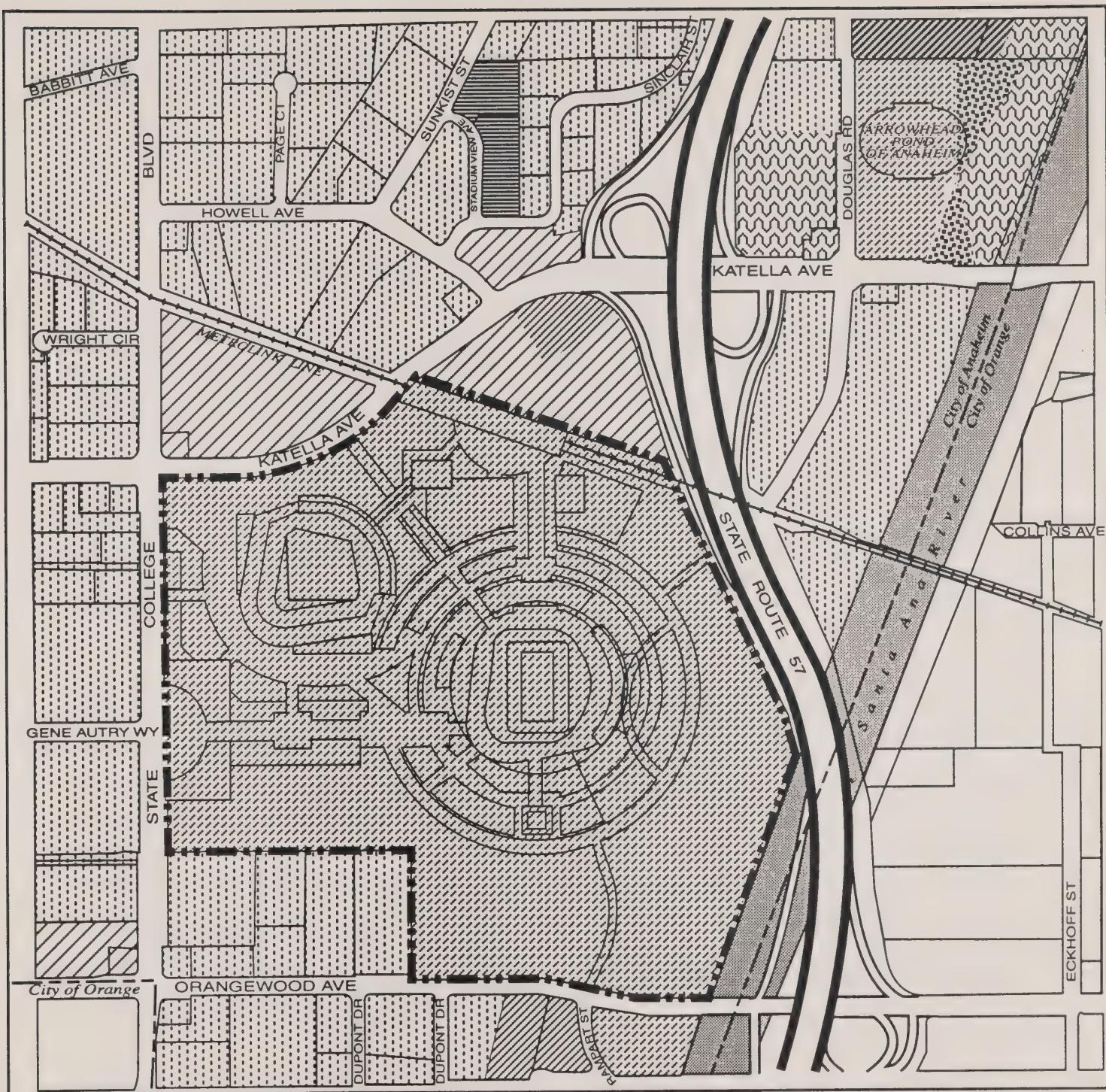
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Source: City of Anaheim, January 1995.

exhibit 3-7

Existing Zoning Designations

ANAHEIM SPORTS CENTER EIR



LEGEND

	Project Boundary		Commercial, Limited		Public Recreational (Flood Plain Overlay)
	Industrial, Heavy		Commercial, Office & Professional		
	Industrial, Limited		Residential/Agricultural		
	Commercial, Heavy		Public Recreational		

800' 400' 0' 800'



Source: The SWA Group, July 1995.

exhibit 3-8
Proposed Zoning Designations

ANAHEIM SPORTS CENTER EIR

SECTION 4

GENERAL DESCRIPTION OF ENVIRONMENTAL SETTING

4.1 OVERVIEW OF ENVIRONMENTAL SETTING

The proposed Anaheim Sports Center site is located in the City of Anaheim, approximately 35 miles southeast of downtown Los Angeles and directly adjacent to the City of Orange to the east, in central Orange County. The regional setting of the project is shown on Exhibit 3-1. The project site is located northeast of the Interstate 5 (I-5) corridor, east of State College Boulevard, south of Katella Avenue, west of the Santa Ana River and State Route (SR) 57 (Orange Freeway), and north of Orangewood Avenue. Regional access to the project is provided primarily by way of I-5 and SR-57 via State College Boulevard and Katella Avenue, respectively. Local access to the site is provided via Gene Autry Way, Douglass Road, State College Boulevard, Katella Avenue, and Orangewood Avenue. The local vicinity is shown on Exhibit 3-2.

From a geophysical perspective, the Anaheim Sports Center is located within the Peninsular Range Province which extends from Los Angeles County to southern Baja California, Mexico. The project site is located near the southeasterly margin of the Central Block, a portion of the Los Angeles Basin. The ground surface of the Central Block, in particular the project site, is a relatively flat surface with a shallow 16-foot-per-mile slope (250:1) to the southwest. This surface was formed by stream deposition meandering back and forth, creating a broad alluvial plain. The alluvial deposits were derived predominately from the Santa Ana River. The Newport-Inglewood Fault trends northwest-southeast, approximately 9 miles south of the site. This fault zone represents the western edge of the Central Block and is characterized by several low, well-rounded hills along the fault trace. The northern margin of the Central Block is represented by the Whittier Fault, approximately 9 miles north of the site at the base of the Puente Hills.

With respect to air quality, the project site is located within the South Coast Air Basin (Basin), in which the existing ambient air quality exceeds state and federal standards for ozone, carbon monoxide, PM10, and nitrogen dioxide. Notable sources of air pollutant emission in proximity to the project site include vehicular traffic on major freeways such as SR-57 and I-5 and local roadways such as Katella Avenue, State College Boulevard, and Orangewood Avenue.

The existing acoustical setting at the site is influenced by roadway noise along major roadways, particularly SR-57, State College Boulevard, and Katella Avenue, and intermittent noise from sporting events and exhibition activities.

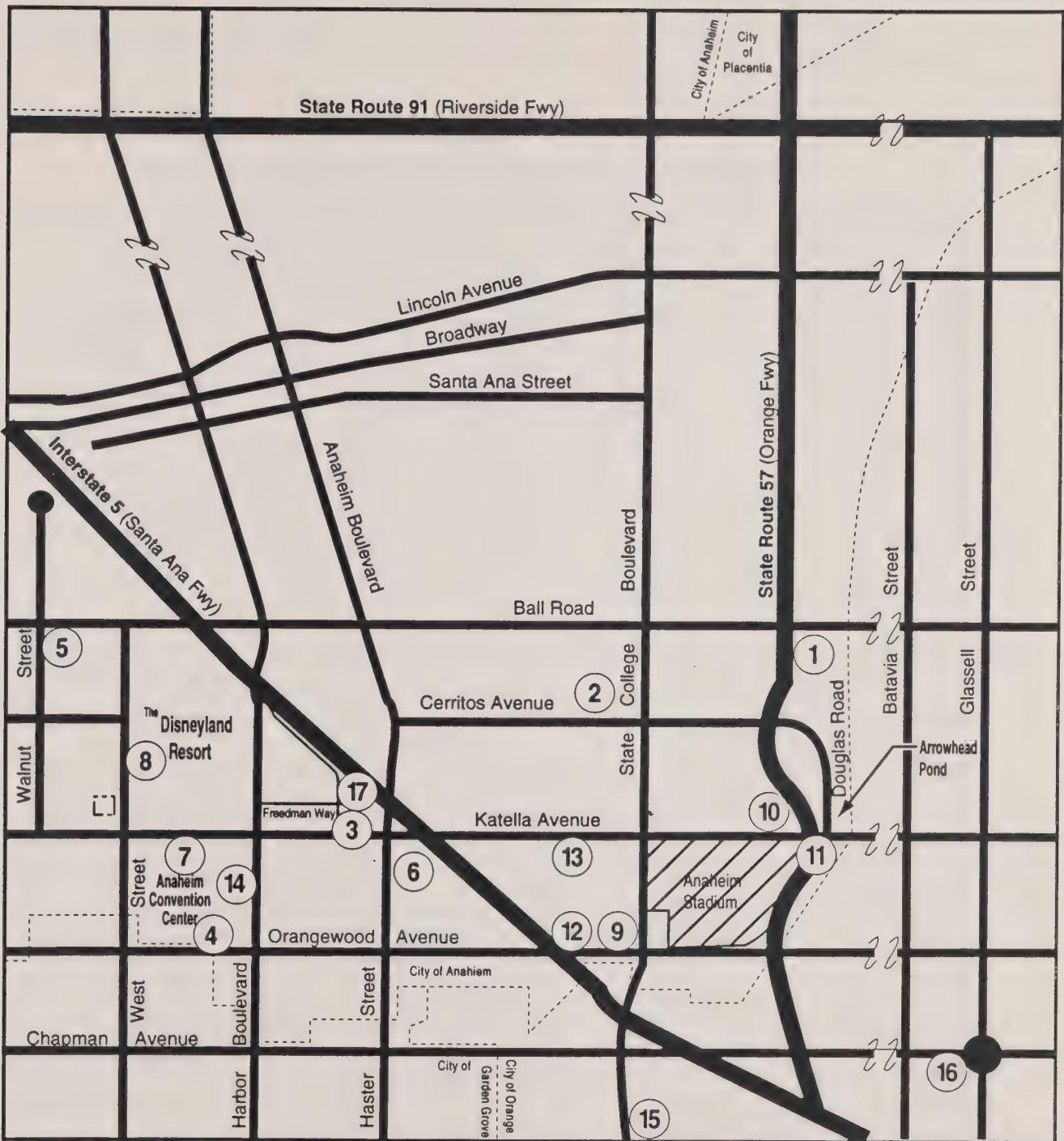
From a land use perspective, the project site currently consists of the existing Anaheim Stadium, and a 16,000-space parking area, commercial and office/professional uses in the northwestern portion of the site, and a Metrolink commuter rail/Amtrak station. Land uses immediately adjacent to the project site include commercial, retail, office/professional, and light industrial-type uses.

4.2 RELATED PROJECTS ASSUMED FOR CUMULATIVE IMPACT ANALYSIS

Section 15130 of the CEQA Guidelines requires the consideration of cumulative impacts within an EIR. Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the project when added to other closely related future projects. In identifying projects which may contribute to cumulative impacts, the CEQA Guidelines allow the use of either a specific list of past, present, and reasonably anticipated future projects, or a summary of projection contained in an adopted General Plan or related planning document which is designed to evaluate regional or areawide conditions. The cumulative analysis discussed in Sections 5.1 through 5.11 is primarily based on a number of future related projects or reasonably anticipated projects producing related or cumulative impacts. The master list of related projects and their locations is presented in Table 4-1, List of Projects Assumed for Cumulative Impacts, and Exhibit 4-1, Related Projects Location Map, respectively.

For the analysis of certain impacts, it is appropriate to consider regional planning documents or studies, which provide projections regarding future development, rather than specific project proposals that are under review. The cited plans in this section are incorporated by reference into this document. For example, regional traffic projections are considered for cumulative traffic impacts, as well as local traffic projections. The specific sources of the planning projections are described below under the relevant environmental category.

In addition to the related projects listed in Table 4-1, several related transportation projects are considered in this analysis, including the Katella Avenue Smart Street, Harbor Boulevard Smart Street, and I-5 improvements. The I-5 improvements are scheduled to proceed within the same time frame as development within the Anaheim Sports Center area. The improvements are described in Section 5.2, Transportation and Circulation.



LEGEND



Project Site



Related Project Location

NOT TO SCALE



NORTH

Source: City of Anaheim, City of Orange, and Orange County Sheriff Department, June 1995 and January 1996.

exhibit 4-1
Related Projects Location Map

ANAHEIM SPORTS CENTER EIR



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TABLE 4-1
LIST OF PROJECTS ASSUMED FOR CUMULATIVE IMPACTS

Project Name	Land Use Types			
	Office (sq. ft.)	Retail (sq. ft.)	Hotel (rooms)	Misc. (sq. ft.)
Approved Projects				
1. Anaheim Auto Center		59,880		
2. Homestead House		100,000*		
3. Katella Avenue Hotel (part of Hotel Circle Phase I)			250	
4. Anaheim Hotel Complex			750	
5. Coral Reef Resort			159*	
6. King Henry's Feast				26,105 (750-seat dinner theater)
7. Convention Center Expansion				248,800 (convention space)
8. The Disneyland Resort		300,000	4,600	4,250,000 (theme park) 200,000 (meeting rooms/convention space)
9. State College Plaza	593,536			
10. Stadium Towers and Stadium Towers Plaza	270,000	21,395		9,280 (restaurant)
11. Arena Restaurant and Micro Brewery		8,000		14,000 (restaurant)
12. Metrocenter (Phase III)	24,430			
13. Hanover/Katella Office Park	1,235,375	56,000		
14. Convention Center Inn and Suites			112	1,776 (restaurant)
Projects Outside Anaheim				
15. Theo Lacy Prison				587,498 (1,785 beds)*
16. Santa Fe Depot Specific Plan				39,465 (retail/restaurant)
Projects in Process				
17. Hotel Circle Specific Plan; Phase II-Atrium Court, Phase II-Parkview			450	
Related Projects Totals	2,123,341	545,275	6,321	5,376,924 (includes 750-seat dinner theater)
Anaheim Sports Center Grand Totals	900,000	750,000	500	45,750 seats
	3,023,341	1,295,275	6,821	5,376,924 (46,500 seats)
* Addition of rooms/square footage to existing use.				
Source: City of Anaheim, City of Orange, and Orange County Sheriff Department, June 1995 and January 1996.				

SECTION 5

ENVIRONMENTAL CONDITIONS, ENVIRONMENTAL IMPACTS, CUMULATIVE IMPACTS, MITIGATION MEASURES, AND SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Section 5 analyzes the project's environmental impacts for the following issues: land use and related planning programs; transportation and circulation; air quality; noise; earth resources; hydrology and water quality; employment, population, and housing; public services, utilities, and energy consumption; hazardous materials compliance; aesthetics; and cultural resources.

The environmental conditions are described for each issue. Potential impacts on the environment by implementation of the Anaheim Sports Center are discussed. Mitigation measures are described which will reduce the impact of the project on the environment. This EIR incorporates both standard mitigation measures, which the City of Anaheim applies uniformly to projects within its jurisdiction, and additional mitigation measures, which are designed to mitigate specific impacts associated with implementation of the Anaheim Sports Center. Any significant unavoidable adverse impacts anticipated within an issue area (impacts that cannot be avoided or lessened with mitigation measures to a level that is less than significant) are described at the conclusion of each subsection.

The property owner and/or developer shall implement all mitigation measures in this section of the EIR or their environmental equivalent if approved by the City of Anaheim. Environmental equivalent shall mean any mitigation measure and timing thereof, subject to the approval of the City, that will have the same or superior result and will have the same or superior effect on the environment. The Planning Department, in conjunction with any appropriate agencies or City departments, shall determine the adequacy of any proposed "environmental equivalent/timing" and, if determined necessary, may refer said determination to the Planning Commission. The City will ensure compliance through the mitigation monitoring process.

5.1 LAND USE AND RELATED PLANNING PROGRAMS

Land use issues addressed in this section include the related plans and policies governing existing and future conditions in the area of the Anaheim Sports Center. This section also discusses the existing and proposed land uses in the project area; the compatibility of land use conditions, such as density, height, and bulk of land uses adjacent to the Anaheim Sports Center site with those within the project area; and the potential conversion of existing uses to uses in conformance with the project.

5.1.1 ENVIRONMENTAL CONDITIONS

Onsite Land Uses

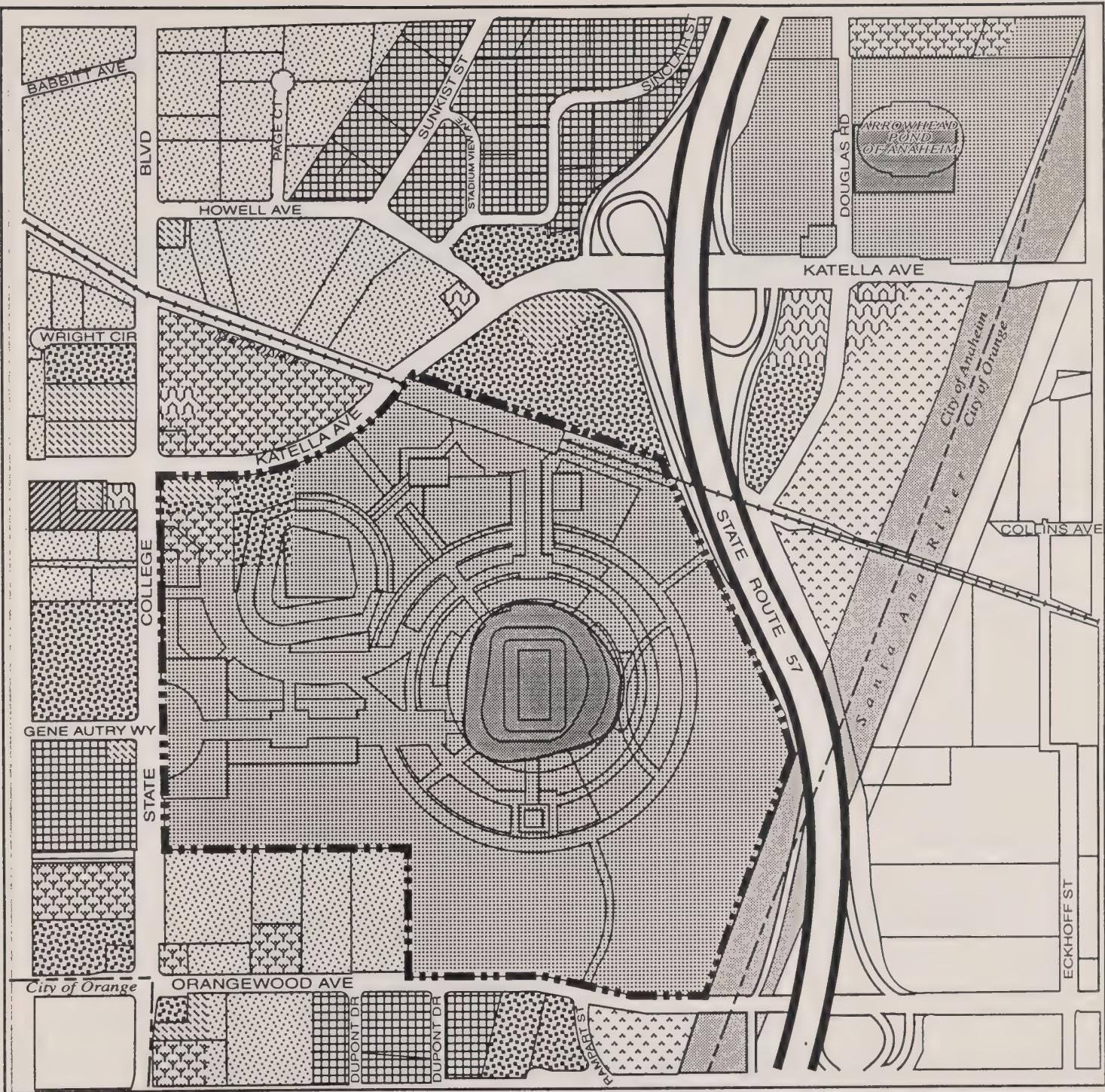
The environmental setting of the project area consists of the existing physical conditions or existing land use in the project area and in the surrounding areas that relate to the project area. Existing land uses within the Anaheim Sports Center site are depicted in Exhibit 5.1-1. The proposed project site encompasses the existing Anaheim Stadium property including approximately 16,000 parking spaces, in addition to commercial and office/professional uses located at the southeast corner of State College Boulevard and Katella Avenue. An underground storm-drain channel extends through the western portion of the project site in a north/south direction.

Surrounding Land Uses

As shown on Exhibit 5.1-1, existing land uses in the project area include commercial/retail (Bryan Universal Roofing, Shell Service Station, etc.) and office/professional uses (Anaheim Stadium Towers, etc.) to the north; the Santa Ana River and State Route (SR) 57 (Orange Freeway) to the east; office/professional (Orangewood Stadium Business Park, etc.), light industrial (Karcher, etc.), and a mobile home park to the extreme south; and commercial/retail (Angel Inn, Arco Gas Station, etc.), restaurant (The Catch, El Torito, National Sports Bar and Grill, etc.), and office/professional uses (Koll Center Orange, etc.) to the west. The site is bounded by Katella Avenue and the SCRRA Metrolink rail line to the north, the Santa Ana River bed to the east, Orangewood Avenue to the south, and State College Boulevard to the southwest. Similar types of land uses, including some residential (mobile home park, etc.), are located further east and south of the site within the City of Orange.

Related Planning Programs

Several local and regional plans and programs apply to, or are currently being prepared related to, development in and around the Anaheim Sports Center site. Table 5.1-1, Related Plans and Policies, lists the related plans and policies analyzed in this EIR. These include elements of the City of Anaheim General Plan, Anaheim Resort Specific Plan, The Disneyland Resort Specific Plan, Recovery Plan for the Anaheim Stadium Project, elements and policies of transportation plans for the County of Orange and the County's Congestion Management Plan, and regional plans such as the Air Quality Management Plan, Growth Management Plan, Regional Mobility Plan, and various other transportation plans. These documents are incorporated by reference into this document. The following discussion identifies these plans and policies.



LEGEND

	Project Boundary
	Industrial Park
	Independent Industrial
	Motel
	Restaurants
	Vacant/Agriculture
	Parking
	Office/Office Parks

	Sports Facilities
	Commercial/Retail
	Public/Utilities

800' 400' 0' 800'



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Source: The SWA Group, July 1995.

exhibit 5.1-1
Existing Onsite and Surrounding Land Uses

ANAHEIM SPORTS CENTER EIR

TABLE 5.1-1
RELATED PLANS AND POLICIES

Relevant Planning Programs	
City of Anaheim Planning Programs	
City of Anaheim General Plan	<ul style="list-style-type: none">● Land Use Element● Circulation Element● Environmental Resource and Management Element● Parks, Recreation, and Community Services Element● Noise Element● Housing Element● Growth Management Element
City of Anaheim Zoning Ordinance	
Development Planning Programs	<ul style="list-style-type: none">The Disneyland Resort Specific PlanHotel Circle Specific PlanThe Anaheim Resort Specific PlanConvention Center Betterment IV ProjectRecovery Plan for the Anaheim Stadium ProjectInfrastructure Planning ProgramsUtility Underground Conversion ProgramSouth Central Area Sewer Deficiency StudyMaster Plan of Drainage for the South Central AreaAnaheim Transportation Plans
Regional Planning Programs	
Orange County Planning Programs	<ul style="list-style-type: none">● Master Plan of Arterial Highways● Orange County Congestion Management Program● Orange County Transportation Authority (OCTA)
South Coast Air Quality Management District (SCAQMD)/Southern California Association of Governments (SCAG) Regional Planning Programs	<ul style="list-style-type: none">● 1991 Air Quality Management Plan● Regional Mobility Plan● Growth Management Plan
Regional Transportation Planning Programs	
California Department of Transportation (Caltrans) Interstate 5 Widening Project	
Orange County Transportation Planning Projects	<ul style="list-style-type: none">● Katella Avenue Smart Street Project
Other Transportation Planning Programs	<ul style="list-style-type: none">● Orange County Major Investment Study for Urban Rail, Enhanced Bus, Transportation Systems Management, Freeway/Roadway (HOV) or No Build● Orange County Commuter Rail Study● SR-91 Freeway Widening and HOV Lanes● SR-57 Freeway Extension to I-405● Transit Way Interchange at Cerritos Avenue and the SR-57 Freeway

TABLE 5.1-1 (continued)

Relevant Planning Programs	
<ul style="list-style-type: none">● Anaheim Stadium Metrolink/Amtrak Rail Station Improvement Project● Amtrak Commuter Rail Feasibility Study● I-5 "Intelligent Transportation Systems"—Radio Advisory and Changeable Message Signs● SR-57/State College Boulevard "Smart Corridor"—Radio Advisory, Changeable Message Signs, and Closed Circuit Television Cameras● Regional bikeway connection of the Santa Ana River Trail and the Anaheim Stadium Metrolink/Amtrak Station● Metropolitan Drive Extension	
Other City Planning Programs	
<ul style="list-style-type: none">● City of Orange General Plan	

An analysis of the project's consistency with the objectives, goals, and policies of the City of Anaheim's General Plan is provided in the "environmental impact" discussion of this section. This EIR also addresses the project's conformity to the General Plan.

City of Anaheim Planning Programs

City of Anaheim General Plan

Adopted in 1963, comprehensively updated in 1984, and continually amended to meet City needs, the Anaheim General Plan establishes guidelines for future development and redevelopment within the City. The General Plan includes the following elements, which are discussed in this section: Land Use; Circulation; Redevelopment; Environmental Resource and Management; Safety and Seismic Safety; Noise; Housing; Parks, Recreation, and Community Services; and Growth Management.

The General Plan covers Anaheim's sphere of influence which includes the approximate 50-square-mile corporate City limits, which is divided into two major planning areas. The Anaheim Sports Center site is located in Planning Area A, which consists primarily of the urbanized area of the City west of the Santa Ana River. Planning Area B consists of developed and undeveloped portions of the hill and canyon area of Anaheim east of the intersection of State Route (SR) 91 and SR-55. The following describes some of the relevant aspects of the Anaheim General Plan.

Land Use Element

Exhibit 5.1-1 shows the existing General Plan Land Use Element designations for the project site. A majority of the project site is designated as Commercial Recreation in the Land Use Element of the

General Plan. Parcels located in the northwestern portion of project site are currently designated Business Office/Service/Industrial under the General Plan. The Commercial Recreation land use category is intended to provide for the development of businesses directly related to the recreation and entertainment industries that provide services to visitors and tourists. The Business Office/Service/Industrial land use category is intended to provide for and encourage the development of major business and professional office centers with commercial uses that support the business offices. A discussion of existing land uses was included earlier in this section under onsite land uses and surrounding land uses.

Goals for commercial development set forth in the Land Use Element include meeting the continuing needs and demands of the community for commercial goods and services, increasing sales tax yields to enhance the economic base of the community, and maintaining and enhancing the position of Anaheim as a nationally recognized tourist center. Two of the Land Use Element policies directly related to development in Commercial Recreation-designated areas are as follows:

- Encourage the development of quality facilities which complement conventions, family entertainment, and recreation within appropriate areas of the community.
- Maintain the integrity of the areas designated as Commercial Recreation by permitting only compatible land uses within these designated areas.

Areas to the north, south, east, and west of the Anaheim Sports Center site are designated Business Office/Service/Industrial. The Anaheim General Plan land use map also identifies a City Riding and Hiking Trail and a Flood Control Channel associated with the Santa Ana River also located immediately east of the site.

Circulation Element

The Circulation Element of the General Plan describes existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the General Plan. Existing conditions of the circulation system in the project vicinity are discussed in greater detail in Section 5.2, Transportation and Circulation, of this EIR.

The Circulation Element designates improvements to the circulation system of the City of Anaheim. The following is a general list of those improvements that would occur throughout the City's Planning Area A that are relevant to the project:

- Implementation of traffic controls by measures of special signalization and contingency parking plans, including shuttle bus service between the Disneyland/Convention Center area and the Sports Center
- Reducing traffic through an alternative transportation information program/service
- Provide "critical intersections" with additional street width in excess of the Standard Arterial Highway Requirements because of their strategic location and need to accommodate high present and/or future traffic volumes and turning movements
- Upgrading the capacity of Katella Avenue and Harbor Boulevard to major arterial classification as part of OCTA's Smart Street Program

In addition, the Circulation Element identifies that a Class III bicycle path is currently situated directly adjacent to the western and southern portion of the site along State College Boulevard and Orangewood Avenue, respectively.

Redevelopment Element

The Land Use Element of the Anaheim General Plan designates the proposed general distribution, location and extent of public and private use of land. The primary goal of the Redevelopment Element is to develop a sound economic base in blighted areas, or in the case of the Stadium property recovery, through assistance, incentives, and opportunities for new development and property rehabilitation. Certain property is now, or may hereafter be, included with a redevelopment project area pursuant to a Redevelopment Plan. A majority of the project site is located in the Recovery Plan area for the Anaheim Stadium Project, a redevelopment area. In carrying out the objectives of the Redevelopment Element of the General Plan, the City's Redevelopment Agency is responsible for, among other things, the preparation and implementation of a redevelopment plan for the project area; acquisition and/or assemblage of land for public or private reuse; provision of relocation assistance and benefits to individuals, businesses, and nonprofit organizations which are required to be relocated as a result of redevelopment activities on the site; construction of public improvements along or in concert with other public authorities and agencies; and clearance, grading, and preparation of land for reuse and/or resale to private developers.

Environmental Resource and Management Element

The Environmental Resource and Management Element consolidates goals and policies for the Conservation and Open Space Elements. The purpose of this consolidation is to recognize the

interrelationships, similarities, and overlapping responsibilities of these elements and to develop goals and policies which reflect those same concerns.

Safety and Seismic Safety Element

The major intent of the Safety and Seismic Safety Element is to identify and appraise hazards resulting from fire, geologic and seismic, flood, and disaster occurrences in order to reduce the risk of these hazards to the public. This Element serves to identify the risk associated with any existing or proposed development, and comparing it with the risk of alternative plans and programs so that planning decisions can be made to enhance the safety of the entire City. The reduction in the risk to life, property, and society is the ultimate achievement of this Element.

Additionally, the Flood Area map identifies a majority of the site as an "intermediate project flood" area. The Emergency Facilities, Evacuation Routes, and Hazardous Areas map also identifies the presence of the Metrolink commuter rail/Amtrak line extending through the northern portion of the site.

Housing Element

The Anaheim Housing Element was amended in November 1989 with an update scheduled for July 1996. The goal of the Housing Element is to plan for the provision of a wide variety of housing opportunities to meet the needs of all economic segments of the community. The Housing Element states that housing development can be considered in nonresidential areas; however, no specific nonresidential areas are identified as potential areas for housing development. Further, the Commercial Recreation land use designation does not include residential uses. Section 5.7, Employment, Population, and Housing, of this EIR provides additional discussion of housing supply and demand in the City.

Noise Element

The Noise Element was adopted in 1979 and comprehensively updated in 1984. The goals of the Element are to protect the community and noise-sensitive land uses, through the City, from excessive noise. The Noise Element policies encourage noise reduction from all sources, including mobile and stationary sources.

Parks, Recreation, and Community Services Element

Adopted in 1992, the Parks, Recreation, and Community Services Element consolidated the Riding/Hiking Trail, Parks, and Recreational Facilities and Community Services Elements into a single comprehensive document. The element provides policy guidance through the year 2010. The purpose of this element is to enhance the overall quality of life by providing a full range of park, recreation, and community service facilities and programs that are accessible to all residents, workers, and visitors. The goals and policies address issues such as the development of park and community service facilities and enhancing visual appeal by development and maintenance of medians, parkways and street trees and enhancing Anaheim's parks, recreation, and services development. The Riding and Hiking Trails Master Plan map of the Parks, Recreation, and Community Services Element identifies a regional trail to the east of the project site that extends along the west levee of the Santa Ana River.

Growth Management Element

The City of Anaheim adopted a Growth Management Element in early 1992 as part of the City's General Plan. The Growth Management Element provides goals and policies to enable the City to better balance public infrastructure and service needs in relation to plans for new growth and intensification of land use in the City, to establish development priorities citywide, and to develop land use strategies to reduce vehicle miles travelled. Additionally, the Growth Management Element addresses coordination between the City's element and regional agencies' growth plans and policies. Relevant regional planning programs are discussed in greater detail later in this section.

City of Anaheim Zoning Ordinance

The majority of the project site is zoned PR, Public Recreational. Some parcels in the northwestern portion of the project site are zoned CO, Commercial, Office and Professional, and ML, Limited Industrial.

The Public Recreational Zone is intended to establish a zone to preserve, regulate, and control the orderly use of City-owned properties and facilities for the benefit of the health, safety, and general welfare of the citizens of Anaheim and adjacent private property.

The Commercial, Office, and Professional Zone is intended to provide for and encourage the development of business and professional office centers essential to Anaheim's economic health, preservation, and growth potential.

Development Planning Programs

The Anaheim Resort Specific Plan

The Anaheim Resort Specific Plan (zoning designation SP92-2) consists of approximately 549.5 acres which includes two land use districts and a Mobilehome Park Overlay. The C-R (Commercial Recreation) District allows for hotels, motels, convention and conference facilities, as well as restaurants, retail shops, and entertainment facilities. The PR (Public Recreational) District encompasses the Anaheim Convention Center and associated parking facilities and provides for the orderly use of City-owned property and the existing Anaheim Hilton Hotel. The Mobilehome Park (MHP) Overlay encompasses existing mobilehome parks within the C-R District to provide development standards for mobilehome parks with regulations and procedures to mitigate relocation concerns and adverse effects of displacement upon mobilehome owners/residents when a park is converted to another land use.

The Disneyland Resort Specific Plan

The Disneyland Resort Specific Plan (zoning designation SP92-1 encompasses approximately 489.7 acres located generally south and west of I-5 (refer to Exhibit 4-1). The Disneyland Resort Specific Plan is analyzed as a separate but related project in Section 4, General Description of Environmental Setting, of this EIR.

The property within The Disneyland Resort Specific Plan area is currently developed with the existing Disneyland theme park and parking lot, the Disneyland Hotel complex, land currently used for agricultural purposes, and support and administrative facilities for the theme park. In addition, several parcels within the Specific Plan area are currently occupied by other uses, including hotels, parking lots, restaurants, retail shops, recreational vehicle parks and campgrounds, a tennis club, and a service station, or are vacant. The adopted Specific Plan creates five districts: Theme Park District, a Hotel District, a Parking District, a Future Expansion District, and C-R Overlay with the intent of changing the area from a day-oriented attraction to a multi-day destination resort. The Disneyland Resort Specific Plan provides for the development of an international multiday vacation destination resort, including the development of a new theme park, known as WESTCOT, additional hotels and entertainment areas, administrative office facilities, support facilities (i.e., maintenance facility, accessory uses, and staging areas), new public and private parking facilities, and an internal transportation system. Said plan additionally provides for the existing Disneyland theme park to continue to be modified with new attractions and other improvements.

The proposed Disneyland Resort Specific Plan contains zoning and development standards to regulate development. These include standards for design, landscaping, signage, and building height to enhance aesthetic conditions in the area.

Anaheim Convention Center Expansion

The City of Anaheim is currently looking to expand the existing facilities at the Anaheim Convention Center. This future expansion would provide for approximately 100,000 additional square feet of exhibit hall space, a maximum of 98,800 square feet of meeting space, and a maximum of 50,000 square feet of ballroom space. An additional 94,000 square feet of lobby space may also be necessary to accommodate the additional exhibit, meeting, and ballroom space.

Infrastructure Planning Programs

Utility Underground Conversion Program

The City of Anaheim has an adopted utility program which includes undergrounding of overhead facilities (e.g., electric, telephone, television cable). According to the plan which was approved by the Anaheim City Council on April 4, 1995, undergrounding of utilities to the north of the site, along Katella Avenue (i.e., Phase III), is temporarily on hold; however, design is expected to begin sometime this year. In addition, the undergrounding of utilities as part of Phase III to the west of the site, along State College Boulevard, is estimated to commence in March of 2001, with design starting sometime in the year 1999.

Recovery Plan for the Anaheim Stadium Project

On January 17, 1994, Southern California experienced an earthquake of a magnitude 6.8 centered in the San Fernando Valley. The earthquake caused significant damage to homes, businesses, and major freeways in the Southland. In Orange County, Anaheim Stadium sustained structural damage when a large scoreboard located above the seating area on the north side of the stadium collapsed. Damage to the stadium was assessed at approximately \$10 million. In order to avoid affecting sporting events and other activities held at Anaheim Stadium as well as losing substantial ticket revenues, the City Council, acting as the Anaheim Redevelopment Agency in concert with the City Council, requested adoption of a recovery project under Section 34000 et seq. of the Health and Safety Code.

As a result of the earthquake damage to the stadium, including damage to the sign, seating, and structure supports, the stadium was adopted as a recovery project in late 1994. As identified in the

Recovery Plan, the design and functionality of the stadium and public improvement deficiencies (i.e., circulation and parking) is threatening the stadium's economic viability. The Recovery Plan addresses both short-term disaster mitigation and long-term design and public improvement deficiencies at Anaheim Stadium.

Anaheim Transportation Plans

In conformance with California State Law (Proposition 111), the City submits biannually to the OCTA a 7-year Congestion Management Plan (CMP) Capital Improvement Program, Maintenance of Effort Budget, and adopted Transportation Demand Management (TDM) Ordinance in an effort to achieve congestion management and air quality improvement objectives.

The City of Anaheim is participating in many transportation plans and programs. These are intended to improve mobility in the City.

Along with OCTA, the City of Anaheim is participating in a Major Investment Study for an Orange County Urban Rail Project (a north-south rail transit project being considered from Irvine Spectrum to the south, through Anaheim, and north to the Fullerton Transportation Center) or other alternatives including No Build, Transportation Systems Management, Enhanced Bus, and Freeway/Roadway (HOV).

The City of Anaheim has awarded a construction contract for improvement of the Metrolink commuter rail/Amtrak station located in the northern portion of the Anaheim Stadium parking lot. This project is being coordinated with the second trail track being constructed by the Southern California Regional Rail Authority.

Other plans include the Regional Bikeway Connection from the Santa Ana River Trail to the Anaheim Stadium Metrolink commuter rail/Amtrak station which was recently awarded construction funding by OCTA; and the mitigated negative declaration for the State College Boulevard/Katella Avenue intersection widening project was adopted in 1991

Regional Planning Programs

Orange County Planning Programs

Master Plan of Arterial Highways (MPAH)

The County's Master Plan of Arterial Highways (MPAH) designates roadways throughout Orange County which serve as regional arterial routes. In the spring of 1995, the Orange County Transportation Authority (OCTA) assumed all responsibilities in overseeing the implementation of the MPAH and its goals and policies from the Orange County Environmental Management Agency (OCEMA). This requires that any changes proposed to arterial designations on the MPAH by cities be processed through the OCTA in the same manner as before. As the MPAH would no longer be part of the County's Transportation Element, alterations to this plan would no longer require an amendment to the County's Transportation Element of General Plan. Major roadways designated on the MPAH within the area of the Anaheim Sports Center site include Katella Avenue, State College Boulevard, and Orangewood Avenue.

Orange County Commuter Bikeways Strategic Plan

The Orange County Commuter Bikeways Strategic Plan (CBSP) provides the policies and practices which help to define the role of bicycle travel within Orange County. According to the CBSP, a Class II (on-road, striped lanes) bikeway is located to the north, south, and west of the site along Katella Avenue, Orangewood Avenue, and State College Boulevard, respectively. Additionally, a Class I (off-road, paved) bikeway is located to the east of the site along the west levee of the Santa Ana River.

Orange County Congestion Management Program (CMP)

California State Law (Proposition 111) requires each county to adopt a CMP that outlines how vehicular congestion issues will be addressed over a 7-year period. A summary of components required by the CMP is as follows:

- a. **Land Use Coordination.** The CMP requires establishment of a program that analyzes the impacts of land use decisions made by local jurisdictions on regional transportation systems. The program shall also estimate the costs associated with mitigating identified impacts.
- b. **Transportation Modeling.** The CMP requires development of a database and transportation modeling system that are consistent with those used by SCAG.

- c. **Level of Service (LOS)**. The CMP requires that traffic LOS standards be established for the CMP Highway System which shall include at a minimum all state highways and principal (major) arterials. The CMP requires that an LOS standard be set at "E" or at the existing LOS, whichever is further from LOS "A," for any intersection or roadway segment on the CMP Highway System.
- d. **Public Transit Standards**. The CMP requires that standards for the frequency and routing of public transit be established and that transit service provided by separate operators be coordinated.
- e. **Transportation Demand Management (TDM)**. The CMP requires that jurisdictions adopt and implement a TDM ordinance that promotes alternative transportation methods.
- f. **LOS Deficiency Plans**. The CMP requires that Deficiency Plans be prepared that describe how excessive congestion on the CMP Highway System can be mitigated in those cases where acceptable LOS cannot be met at certain locations.
- g. **Capital Improvement Program (CIP)**. The CMP requires establishment of a 7-year CIP to maintain or improve LOS and transit performance standards and assist in achieving congestion management and air quality improvement objectives.
- h. **Bi-Annual Monitoring**. The CMP requires that the Congestion Management Agency (CMA), which in Orange County will be the Orange County Transportation Authority created through SB 838, bi-annually determine if the County and Cities are conforming with CMP requirements and shall monitor the implementation by each jurisdiction of all elements of the CMP. In accordance with the Orange County CMP, adopted by the OCTA, the City of Anaheim adopted a Transportation Demand Management Ordinance in 1991.

The Orange County CMP was adopted in July 1991 by OCTA. Development of the plan involved a coordinated effort among local jurisdictions, public agencies, and business and community groups in the County. The CMP contains provisions for a number of elements intended to improve the County's transportation systems. The following elements are included for the first year of the plan:

- Traffic LOS standards for the CMP Highway System and measurement of existing LOS
- Adoption of Transportation Demand Management ordinances by all Orange County local jurisdictions
- A 7-year Capital Improvement Program
- Transit service standards and development of a short-range transit plan
- A monitoring checklist process for the four items above

Additionally, OCTA has adopted the processes and framework for land use coordination, model and data base uniformity, and level of service deficiency plan components. These components are being updated in connection with the 1992 Orange County CMP. The City of Anaheim is a participant in the CMP process with the County and has been complying with the above elements pursuant to the County CMP with respect to transportation-related planning and management for the City.

South Coast Air Quality Management District (SCAQMD)—Southern California Association of Governments (SCAG) Regional Planning Programs

1991 Air Quality Management Plan

The SCAQMD Board adopted an Air Quality Management Plan (AQMP) revision on July 12, 1991, which was prepared to address requirements of the California Clean Air Act. It was prepared prior to adoption of the 1990 amendments to the federal Clean Air Act and did not address federal attainment planning requirements. The SCAQMD adopted a revised AQMP in July 1994 that addresses both state and federal requirements.

Specific AQMP measures seek to reduce vehicle trips (VT) and vehicle miles travelled (VMT), including an extension of SCAQMD Regulation XV that would further reduce work-related trips and other trip-reduction measures directed toward schools and indirect source facilities that attract vehicle trips, such as special event centers, regional shopping centers, and airports. Additional information on the AQMP, VMT reductions, and conformity guidelines is provided in Section 5.3, Air Quality, of this EIR. The analysis of the project's conformity with the AQMP is also presented in Section 5.3, Air Quality.

Regional Mobility Plan

The Regional Mobility Plan (RMP) selects the combination of infrastructure and transportation control requirements considered to best accommodate the projected population increases in the region until the year 2010 (SCAG 1994). Proposed projects must comply with the RMP prior to approval. The RMP is consistent with the Growth Management Plan, discussed below.

Growth Management Plan

The Growth Management Plan (GMP) prepared by SCAG contains projections of employment, population, and housing growth in the Basin and serves as the basis for regional planning efforts to accommodate growth and mitigate the impacts of such growth. In addition, the GMP establishes

regional guidelines for local governments to manage growth, including balancing the distribution of future job and housing opportunities in the region (SCAG 1994). The plan also sets jobs/housing ratio goals for SCAG's region. Section 5.2, Transportation and Circulation, of this EIR addresses regional traffic circulation; and Section 5.3, Air Quality, addresses the GMP in light of regional air quality impacts.

Regional Transportation Planning Programs

California Department of Transportation (Caltrans) Interstate 5 Widening

This program involves reconstruction of I-5 throughout Orange County to widen and realign the freeway, add high occupancy vehicle (HOV) lanes, and implement interchange system improvements. Caltrans and the Federal Highway Administration (FHWA) have certified the EIR/EIS for the widening project. Anticipated dates for construction work on these projects generally range from December 1996 to 1999. Work on the widening of the portion of I-5 that would provide regional access to the project area is currently scheduled to begin by 1996 and be completed by 2000. The analysis in Section 5.2, Transportation and Circulation, of this EIR assumes completion of I-5 improvements by that date.

Orange County Transportation Planning Projects

Katella Avenue Smart Street Project

The County of Orange has certified an EIR for the Katella Smart Street Project. The EIR examined the potential impacts of widening Katella Avenue from Interstate 605 (I-605) to State Route 55 (SR-55), including the segment that borders the site to the north.

Other Transportation Planning Programs

In addition to the above transportation plans and projects, the following transportation studies and planning programs may involve the vicinity surrounding the project:

- Orange County Major Investment Study for Urban Rail, Enhanced Bus, Transportation Systems Management, Freeway/Highway (HOV), or No Build
- Orange County Commuter Rail Study
- State Route 91 Freeway Widening and HOV lanes

- State Route 57 Freeway HOV Lanes
- State Route 57 Freeway Extension to the Interstate 405 Freeway
- Transit Way Interchange at Cerritos Avenue and the State Route 57 Freeway
- Anaheim Stadium Metrolink/Amtrak Rail Station Improvement Project
- Amtrak Commuter Rail Feasibility Study
- I-5 "Intelligent Transportation Systems"—Radio Advisory and Changeable Message Signs
- SR-57/State College Boulevard "Smart Corridor"—Radio Advisory, Changeable Message Signs, and Closed Circuit Television Cameras

Relevant transportation system improvements are discussed further in Section 5.2, Transportation and Circulation, of this EIR.

Other City Planning Programs

City of Orange General Plan

The City of Orange is located to the east and south of the project site. In 1989, the City of Orange adopted a comprehensive update to each element in its General Plan. This update was prepared to reflect more current conditions within the City and the more recent desires of the City relative to long-term growth.

5.1.2 ENVIRONMENTAL IMPACTS

Implementation of the Anaheim Sports Center project will require several discretionary actions and will result in the renovation of the existing Anaheim Stadium; development of a new stadium and complementary land uses such as urban entertainment/retail, office, two hotels, a youth sports center; and continuation of exhibition uses, as described in Section 3, Project Description, and depicted on Exhibit 3-7 of this EIR. Additionally, the project proposes a reconfiguration of the existing 16,000-space parking area to provide for 14,000 onsite spaces. Implementation of the project would also require the use of additional offsite parking spaces during major sporting event times (baseball, football, etc.), when necessary.

Thresholds of Significance

The proposed project will result in a significant impact on the environment related to land use issues if:

- Substantial compatibility conflicts between onsite and/or offsite land uses are created.
- The project is inconsistent with the goals, objectives, or policies/implementing actions of any local, state, or federal plan or program.
- Land use compatibility and operational conflicts are considered significant if they will lead to impacts in the health and general welfare of person living or working in the area of physical impacts on adjacent properties that would, in turn, lead to physical degradation of the properties cause by disinvestment or abandonment.

Land Use Compatibility

Land use compatibility is primarily determined by the sensitivity of land uses to the characteristics associated with another land use, such as activity, noise, density, height, bulk, and/or appearance. Therefore, other sections of this EIR, which analyze these environmental changes, are relevant to the analysis of land use compatibility and are referenced in this discussion.

Compatibility With Onsite Land Uses

The development of the project site will be implemented in a manner that will minimize potential land use conflicts internal to the site. Because of the consistency of the land uses being proposed onsite, no significant internal land use compatibility impacts are expected to occur with project implementation.

The southeast corner of State College Boulevard and Katella Avenue contains existing industrial, commercial, and office/professional uses, as well as vacant land (see Exhibit 5.1-1). This area is proposed to be incorporated as part of the project. Under the project, these uses would be removed and replaced with uses that would complement the remaining development on the Anaheim Sports Center site. Significant compatibility impacts are not expected to result from the dislocation of these uses because of the availability of other industrial, commercial, and office/professional uses in the immediate vicinity, in addition to the commercial and office/professional space that may be available to these tenants as part of the Anaheim Sports Center. Moreover, acquisition of all real or other property interests, required as part of the project, will be conducted in compliance with all legal

requirements. Relocation assistance described in 42 U.S.C. 4601 *et seq.* and California Government Code Section 7260 *et seq.* will be extended to any eligible displacee.

Compatibility With Surrounding Land Uses

The project's compatibility is dependent upon a number of issues such as activity, intensity of use, and appearance of the Anaheim Sports Center compared with the existing surrounding land uses. Compatibility with surrounding land uses can be separated into two categories: (1) compatibility of developing uses with surrounding properties, and (2) potential ongoing operational conflicts with surrounding uses. Such incompatibilities and conflicts are characterized by nuisances, such as odor and noise, physical or visual intrusion into the adjacent land uses, substantial traffic intrusion or operational intrusion, or increased risk to human safety. Without appropriate site planning that includes adequate separation of uses, buffers, setbacks, and safeguards, such conflicts could be significant. As indicated previously, the land uses proposed within the Anaheim Sports Center site are designed to be internally compatible with each other and other adjacent uses.

No potential significant incompatibilities between the proposed land uses within the Anaheim Sports Center site and the surrounding area are anticipated because the proposed uses have been designed to complement and support the land uses within the surrounding area. Further, the Anaheim Sports Center and the surrounding area will have similar or compatible operation requirements (e.g., hotels, restaurants, and parking facilities.)

City of Anaheim Planning Programs

City of Anaheim General Plan

Land Use Element

The Commercial Recreation uses are consistent with the goals and policies of the Anaheim General Plan Land Use Element for the Anaheim Sports Center site, as development of the site will contribute to improving the City's economic base, enhancing the position of Anaheim as an internationally recognized tourist destination, and providing compatible land uses within the Commercial Recreation designation. The goals and objectives of the Anaheim Sports Center are further discussed in Section 3.3, Project Objectives, of this EIR.

As discussed in Section 2, Project Description, of this EIR, amendments to the General Plan will be required to recognize that the entire Anaheim Sports Center site implements the Commercial

Recreation land use designation and establishes commercial-recreation types of development. Exhibit 3-2, Project Vicinity Map, of this EIR provides in detail the boundaries of the project site.

Circulation Element

Circulation system improvements proposed as part of the Anaheim Sports Center are discussed in Section 5.2, Transportation and Circulation, of this EIR. These could include improvements to vehicular circulation, mass transit, and pedestrian circulation. The recommended circulation improvements are consistent with circulation plans for the area and would not result in a significant impact on these plans because they would improve pedestrian circulation and would not substantially reduce overall vehicular circulation capacity of the project area. Therefore, the project would be consistent with the goals and policies of the Circulation Element.

Redevelopment Element

Implementation of the proposed project would be consistent with the goals and policies of the Redevelopment Element. The project would provide for the removal of economically substandard buildings through the renovation of the existing Anaheim Stadium and parking area. Implementation of the proposed project will also necessitate removal of land uses located on the northwestern portion of the site, in addition to the introduction of an array of complementary uses such as urban retail/entertainment, office, hotels, and a continuation of exhibition activities. These uses would be situated on the project site in a manner to facilitate land disposition and development, thereby ensuring further consistency with the Redevelopment Element.

Environmental Resource and Management Element

The proposed project is considered to be consistent with the objectives of the Environmental Resource & Management Element. Much of the urbanized County area, including Anaheim, lies within a flood plain area. To ensure consistency with the Environmental Resource & Management Element's Conservation Element, the project would be developed outside of the 100-year flood and would not affect those facilities (Santa Ana River, etc.) that provide 100-year flood protection to the City of Anaheim and the project area. The project would ensure that proper management and use of the City's water-related uses and floodplains (i.e., Santa Ana River) would not be affected through interface and cooperation with the various water and flood control districts during development of the site.

Safety and Seismic Safety Element

The proposed project is considered to be consistent with the objectives of the Safety and Seismic Safety Element. Section 5.5, Earth Resources, Section 5.6, Hydrology and Water Quality, and Section 5.11, Public Services, Utilities, and Energy Consumption, of this EIR, provide detailed discussion regarding relevancy with geologic and seismic and flood hazard goals and policies, respectively, as identified in the Safety Seismic Safety Element.

Housing Element

The proposed Anaheim Sports Center does not include development of residential uses nor are they permitted or proposed within land zoned Commercial Recreation. Although the project would not have a direct effect on housing, implementation of the Anaheim Sports Center is expected to increase employment opportunities within the City of Anaheim. Consequently, a certain number of these employees would require housing within the City or surrounding communities. However, the project is not expected to result in significant adverse impacts to the City's goal associated with the opportunity for these employees to find decent, affordable housing in safe, attractive City neighborhoods. Potential effects on the housing supply and demand are discussed in Section 5.7, Employment, Population, and Housing, of this EIR.

Noise Element

Development of the proposed Anaheim Sports Center would be subject to the mitigation measures set forth in this document and the Mitigation Monitoring Program addressing noise issues. Mitigation measures include restricting construction activities to comply with the City's Sound Pressure Level Ordinance, transportation improvements to reduce traffic congestion (and, therefore, noise) on arterials, and providing for buffering noise walls and berms in noise-sensitive areas. No significant indirect impacts or inconsistencies with the Noise Element anticipated. The complete noise analysis can be found in Section 5.4, Noise, of this EIR.

Parks, Recreation, and Community Services Element

The project will help the City of Anaheim achieve goals established for parks, recreation, and community service in several ways. Enhanced landscaping and streetscaping are provided on the project site. In addition, landscaped gateways and medians are proposed as part of the project to create safe and visually appealing public walkways. An ample parking area with open space features (orchard trees, etc.) will be provided onsite. The proposed project also builds upon the existing

character of the Anaheim Stadium site as an established recreation center, with features that support and enhance this character. Overall, the proposed project will enhance recreational opportunities by adding another professional stadium and a 750-seat youth stadium. Further, the proposed urban entertainment center will provide residents, conventioneers, tourists, and workers with more leisure options. Therefore, no conflicts or significant impacts to the Parks, Recreation, and Community Services Element are anticipated.

Growth Management Element

Development of the Anaheim Sports Center will be accompanied by improvements in public infrastructure and services, as discussed in Section 5.8, Public Services and Utilities, of this EIR. The project's consistency with Growth Management Element policies is established by addressing the needed infrastructure improvements, including reduction to vehicle miles traveled (VMT) and improvements to public facilities and services. As the project is developed, infrastructure improvements will be made to ensure that implementation of the proposed project would not affect facilities that would serve the site or surrounding area. In addition, the project area is identified in the City's Economic Development Strategic Plan as a priority growth area. Overall, the proposed project is consistent with the Growth Management Element in that it identifies needed improvements to existing infrastructure and public services and facilities and incorporates measures to provide these needed improvements. Therefore, no significant impacts on the goals of the Growth Management Element are anticipated. As required by the element, the EIR mitigation measures will adequately pace project development with the provision of any needed infrastructure and public services.

City of Anaheim Zoning Ordinance

A majority of the project site is zoned PR, Public Recreational. Implementation of the project will require redesignation of parcels in the northwestern portion of the project site from a zone of CO, Commercial, Office, and Professional; and ML, Limited Industrial; to PR, Public Recreational. This would provide for new development standards and regulations for this portion of the site. The nature of this proposed action is consistent with state planning and land use law (e.g., making zoning consistent with the General Plan) and is compatible with the planning framework within the City, which is based on large-scale comprehensive planning.

Development Planning Programs

The Anaheim Resort Specific Plan

The Anaheim Resort Specific Plan provides for the development of hotels, motels, convention and conference facilities, as well as restaurants, retail shops, and entertainment facilities, in addition to providing for the orderly use of City-owned property. The eastern boundary of the Anaheim Resort Specific Plan site is located just west of the Anaheim Sports Center site. Implementation of the Anaheim Sports Center will take into consideration the Anaheim Resort Specific Plan to ensure consistency with the General Plan (orderly use of City-owned property, etc.) and to avoid planning incompatibilities. Both plans are designed to provide linkage between the two areas, thereby enhancing the visual quality and infrastructure of the City and the project area, in addition to affirming the City's standing as a world-class resort destination. Therefore, no significant planning-related impacts on the Anaheim Resort Specific Plan are anticipated with development of the proposed project; rather, implementation of the proposed project would provide a beneficial effect on the plan.

The Disneyland Resort Specific Plan

The Disneyland Resort Specific Plan provides for the development of a new theme park, additional hotels, and public parking facilities within the Anaheim Resort. The Anaheim Sports Center site is located east of The Disneyland Resort Specific Plan area. Development of the Anaheim Sports Center will take into consideration The Disneyland Resort Specific Plan to ensure consistency with the General Plan and to avoid planning incompatibilities. Both plans are designed to provide linkage between the two areas, thereby enhancing the visual quality and infrastructure of the City and the project area, in addition to affirming the City's standing as a world-class resort destination. Therefore, no significant planning-related impacts to The Disneyland Resort Specific Plan are anticipated from the development of the proposed project; rather, implementation of the proposed project is expected to have a beneficial effect on the plan.

Anaheim Convention Center Expansion

The expansion of the Anaheim Convention Center would provide additional exhibit hall, meeting, and ballroom space. Similar to other regionally significant planning programs for recreational facilities (i.e., Disneyland Resort Specific Plan and Anaheim Resort Specific Plan) in the immediate area, development of the Anaheim Sports Center will take into consideration the Convention Center expansion to ensure consistency with the General Plan (orderly use of City-owned property, etc.) and to avoid planning incompatibilities. Both plans provide for the overall enhancement of the area and

infrastructure of the City and the project area, in addition to affirming the City's standing as a world-class resort destination. Therefore, no significant planning-related impacts on the Convention Center expansion are anticipated from project development.

Infrastructure Planning Programs

Utility Underground Conversion Program

As part of the City of Anaheim's 5-year Underground Conversion Program, the City has approved undergrounding of all the existing and future utilities (69 kV and 12 kV transmission and distribution systems, communication systems, telephone, CATV, and associated facilities) on the major roadways in the project area. Potential impacts on public services and utilities are discussed in Section 5.8, Public Services, Utilities, and Energy Consumption, of this EIR.

Recovery Plan for the Anaheim Stadium Project

Similar to other adopted infrastructure improvement plans for the project area, implementation of the proposed project will require compliance with the provisions of, and the implementation of, mechanisms adopted by the City as a result of the Recovery Plan for the Anaheim Stadium Project. This project would further strengthen the goals and objectives of the Recovery Plan through the implementation of standards and design features for the renovation of the existing stadium and development of the proposed stadium and acquisition and enhancement of those land uses currently located in the northwest corner of the site. No significant impacts are anticipated.

Anaheim Transportation Plans

The various transit modes available and planned to serve the City of Anaheim will facilitate visitors to the site who are arriving by transportation modes other than automobile. It is anticipated that shuttles from The Disneyland Resort and other hotels located within the Anaheim Resort will pick up/deliver guests of these hotels to the Sports Center site. OCTA buses will also provide service directly to the site, which will assist employees commuting by car. The project site may also be accessed via the potential Orange County Urban Rail and the existing Metrolink commuter rail/Amtrak rail line located in the northern portion of the project site. The project's accommodation of various means of transportation is considered a beneficial effect.

The Anaheim Sports Center incorporates measures to improve and maintain vehicular and mass transit improvements within the project area. These improvements are discussed in Section 5.2, Transportation and Circulation, of this EIR. The Anaheim Sports Center will comply with the City of Anaheim's Transportation Demand Management (TDM) program, which, in turn, will be in compliance with the Orange County CMP. In addition, the project will not significantly affect any designated critical intersections. No significant impacts are anticipated.

Regional Planning Programs

Orange County Planning Programs

Master Plan of Arterial Highways (MPAH)

The Anaheim Sports Center does not propose any changes to OCTA's MPAH, as discussed in Section 5.2, Transportation and Circulation, of this EIR. Future developments proposed within the project area are not expected to require changes to the MPAH. Therefore, no significant impact to this program is anticipated with implementation of the project.

Orange County Commuter Bikeways Strategic Plan

The Anaheim Sports Center does not propose any changes to the CBSP, nor is the project expected to affect (relocate, limit access, etc.) those bikeways located within the vicinity of the site. Future development proposed within the project area is also not expected to require changes to the CBSP. Therefore, no impact to this program is anticipated with implementation of the project.

Orange County Congestion Management Plan (CMP)

As discussed in Section 5.2, Transportation and Circulation, of this EIR, the project will not degrade any portion of the CMP network to an unacceptable level of service after mitigation and, therefore, will be consistent with the goals of the CMP. The City is complying with the OCTA-established CMP, and future developments proposed within the project area will be required to comply with area TDM programs, in conformance with the CMP. No significant impacts are associated with the project.

South Coast Air Quality Management District (SCAQMD)/Southern California Association of Governments (SCAG) Regional Planning Programs

1991 Air Quality Management Plan

Conformance of the project with the AQMP is discussed in Section 5.3, Air Quality, of this EIR. The project complies with all three criteria of the plan: (1) VMT reduction or jobs housing balance, (2) TDM implementation, and (3) conformity with AQMP assumptions; therefore, no significant impacts are associated with the project.

Regional Mobility Plan (RMP)

As discussed in Section 5.2, Transportation and Circulation, of this EIR, the project will contribute to infrastructure improvements and transportation control measures that will help accommodate the projected population growth in the region. Therefore, the proposed project is considered consistent with the goals of the RMP, and no significant impacts are anticipated (refer to Section 5.2, Transportation and Circulation, and Section 5.3, Air Quality).

Growth Management Plan

The relationship of the project to SCAG's GMP and regional transportation air quality issues is discussed in Section 5.2, Transportation and Circulation, and Section 5.3, Air Quality, of this EIR. The project is consistent with the plan, and no significant impacts are anticipated.

Regional Transportation Planning Programs

California Department of Transportation (Caltrans) Interstate 5 Widening

The Caltrans I-5 improvement program, including the transitway and HOV lanes, will include two new HOV direct connector offramps from the freeway. These ramps will be in addition to the new and reconfigured mixed-flow ramps that are part of the Caltrans' plans for the I-5 improvement program and are part of the regional and local transportation programs.

As part of the I-5 widening project improvements, an I-5 HOV connector ramp will connect directly with the easterly extension of Gene Autry Way, which is a major access point/gateway into the project site. This change, in addition to the reconfiguration of the State College Boulevard on/off ramp, will provide for a greater ease of access to the site from I-5 and is considered to be a benefit to traffic flow

in the area. As discussed in Section 5.2, Transportation and Circulation, of this EIR, the project provides for integration of the transportation and circulation improvements of future development projects with Caltrans' widening of I-5; therefore, no significant adverse effects are anticipated.

Orange County Transportation Authority Planning Projects

Katella Avenue Smart Street Project

The Smart Street designation and funding of Katella Avenue will provide more capacity between I-605 and SR-55. This will accommodate traffic flow through the project area. There will be no significant impacts on the Smart Street project from plan implementation.

Other Transportation Planning Programs

A series of transportation plans and projects (State Route 55 HOV Lanes, State Route 91 HOV Lanes, etc.) are underway or have been completed that may involve the vicinity surrounding the Anaheim Sports Center site.

The Major Investment Study (MIS) is evaluating urban rail routes extending from Irvine Spectrum north to Anaheim Stadium and connect with the Fullerton Amtrak Station. Within Anaheim, two alignments connecting Anaheim Stadium to Fullerton are being examined: west on Katella Avenue and north on Clementine Street, and west on Cerritos Avenue, northwest along I-5, and north along Harbor Boulevard. The MIS is also exploring No Build, Transportation Systems Management, Enhanced Bus, and Freeway/Roadway (HOV) alternatives. The project will encourage a connection to the fixed guideway system by future development. No significant project impacts will occur.

Implementation of these plans would provide a traffic flow benefit to the area. As discussed in Section 5.2, Transportation and Circulation, of this EIR, the Anaheim Sports Center provides for integration of these transportation plans and projects; therefore, no significant adverse effects are anticipated.

Other City Planning Programs

City of Orange General Plan

As the proposed project is not located within the jurisdiction or sphere of influence of the City of Orange, the City's General Plan does not directly pertain to development of the proposed project. Nevertheless, due to the proximity of the project to the City of Orange, the consistency of the

proposed project with the general development plans enumerated in the General Plan are evaluated. Although impacts on the City's General Plan policies are not expected to occur with project implementation, issues (land use compatibility, traffic, aesthetics, etc.), as they relate to the City of Orange have been discussed under the individual environmental issues, as appropriate, as found in Section 5, Environmental Conditions, Environmental Impacts, Cumulative Impacts, Mitigation Measures, and Significant Unavoidable Adverse Impacts, of this EIR.

5.1.3 CUMULATIVE IMPACTS

The study area for land use takes into consideration the related projects' and the proposed project's consistency with plans, policies, and programs of the City of Anaheim and responsible agencies. As such, the "study area" is not considered except in the sense that each plan, policy, and program applies to a specific geographic area.

The additional development that will occur within the area of the Anaheim Sports Center site is expected to primarily consist of hotels, restaurants, and retail uses. The related projects shown in Table 4-1 and Exhibit 4-1, plus proposed related project development within the Anaheim Sports Center area, would add a number of new hotel and motel rooms; substantial amounts of office space, retail space, and theater seats; and a variety of miscellaneous uses. Therefore, for purposes of this analysis, it is assumed that the future land uses proposed as part of the project in conjunction with development of related projects would be consistent with the existing City of Anaheim General Plan and Regional Growth Management Plan and the other local and regional planning documents described in Section 5.1, Land Use and Related Planning Programs, of this EIR. Cumulative impacts associated with other land use issues such as drainage, traffic, noise, etc., are discussed elsewhere in this section.

The areas surrounding the site to the north, south, and west are fully developed with business service, office/professional, commercial, and light industrial-type uses. To the immediate east of the site is the Santa Ana River, in addition to commercial, office/professional, and light industrial-type uses. While future development is planned within a majority of area surrounding the site, the type of uses (office/professional, commercial, etc.) would be complementary to the project. In addition, existing land use relationships were established through development of the various land uses over time consistent with General Plan designations. The Anaheim Sports Center also addresses the issue of land use compatibility in terms of providing edge treatment with appropriate setbacks, height limits, design features, and landscape treatments to ensure compatibility with the existing and future surrounding development and to enhance the aesthetic quality of the area. Moreover, the intent of the project is to protect the integrity of the existing and future commercial recreation uses within the plan area.

The area influenced by cumulative land use compatibility impacts is within the boundaries of the site and the immediate surrounding areas; due to the types of land use surrounding the project site, land use compatibility with more distant areas will not likely be affected by the implemented land uses of the proposed project. Related projects in the surrounding area have been included in Table 4-1 if they have either been (1) submitted for plan processing, (2) approved by the City of Anaheim or adjacent cities, and/or (3) have been engaged in active construction. Largely a developed area, the established land use patterns and intensities are reinforced by General Plan designation for the site.

5.1.4 MITIGATION MEASURES

Mitigation Measure 1-1. The City will review final site plans for development within the Anaheim Sports Center site for consistency with any adopted plan for the area.

5.1.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse effects are anticipated.

5.2 TRANSPORTATION AND CIRCULATION

This section of the document summarizes the technical report, Anaheim Sports Complex Traffic Analysis (Austin-Foust Associates, Inc., January 1996), contained in Appendix C of the EIR. The report includes an assessment of the impact of traffic that would be generated by development of the Anaheim Sports Center on the local and regional transportation systems. This section also reflects information contained in the Anaheim Resort Specific Plan EIR certified September 1994.

The purpose of this analysis is to identify the traffic implications associated with the Anaheim Sports Center and to recommend mitigation measures, if necessary, that will provide adequate levels of service on the surrounding circulation system. As indicated previously, the project would involve the implementation of a new 70,500 seat football stadium and a renovated 45,000 seat Anaheim Stadium for baseball or a new 45,000 seat baseball stadium and a renovated 70,500 seat Anaheim Stadium for football. Although the project would introduce an additional 45,000 seats onsite, the stadiums presented in these scenarios would not operate at the same time. Consequently, potential traffic and circulation impacts would not occur as a result of the additional stadium and, therefore, was not evaluated in this section. Also note that the project assumes that use of the existing exhibition center space (150,000 square feet) would only occur during those times in which a major stadium sporting event is not taking place, as is the current practice. Therefore, the exhibition center would not contribute to the project's effects on transportation and circulation. However, during the very rare occasion when a special sporting event such as a Super Bowl or World Series occurs on the project site, exhibition space for related activities such as the National Football League Experience, All-Star FanFest, etc. would be utilized concurrently. It should be noted, though, that a majority of those people attending a Super Bowl or World Series would also attend these event-related exhibition activities.

Specific traffic impacts of the proposed Anaheim Sports Center were identified by analyzing short-range (year 2000) and long-range (year 2010) traffic conditions. The analysis examines average daily traffic (ADT) on the surrounding circulation system as well as the peak hour level of service impacts at critical intersections. For the short-range (year 2000) analysis, impacts due to partial development of the Anaheim Sports Center assumed to be half the buildout development of the project, are examined based on short-range growth projections for the City of Anaheim and surrounding areas, while traffic conditions corresponding to full development of the proposed Anaheim Sports Center and buildout of the surrounding area are used to evaluate long-range (year 2010) traffic impacts.

Future traffic forecasts for use in the study were produced using the Anaheim Traffic Analysis Model (ATAM), a computerized traffic forecasting model.

5.2.1 ENVIRONMENTAL CONDITIONS

Surrounding Highway Network

The project site is bounded by two major arterials (Katella Avenue and State College Boulevard), a primary arterial (Orangewood Avenue) and a freeway (SR-57), respectively. The arterials provide local access to the site via four entrances. Regional access is provided by SR-57 which passes northwest to southeast south of the site and the Santa Ana Freeway (I-5) to the west of the site. On- and offramps are provided along the SR-57 at both Orangewood Avenue and Katella Avenue to facilitate access to the site. The existing Metrolink commuter rail/Amtrak Station on the northern portion of the site will be incorporated into the project as a major access point or transportation hub. Exhibit 5.2-1 illustrates the existing surrounding circulation system.

The Santa Ana Freeway (I-5) is a six-lane freeway that is located west of the study area in the City of Anaheim, traversing diagonally from beyond the City of Los Angeles on the north to the City of San Diego on the south. SR-57 is a 10-lane freeway inclusive of two high occupancy vehicle (HOV) lanes in the project area, oriented in a north-south direction, traversing from the City of Diamond Bar to the north to the City of Orange to the south.

Performance Criteria

Evaluating the ability of the circulation system to serve the desired future land uses requires establishing suitable "performance criteria." These are the means by which future traffic volumes are compared to future circulation system capacity, and the adequacy of that circulation system assessed.

For this analysis, the circulation system evaluation is based on peak hour data. Capacity needs tend to be most important at intersections, and the use of peak hour data enables intersection capacity needs to be determined. The detailed forecasting capability of the ATAM allows long-range peak hour data on the circulation system to be forecast with a reasonable level of accuracy. Forecasts are made at an intersection level with individual intersection turn movements being estimated. Based on these turn movement volumes, Intersection Capacity Utilization (ICU) values are estimated for the a.m. and p.m. peak hours. Peak hour refers to the hour during the a.m. peak period (typically between 7 a.m. and 9 a.m.) or the p.m. peak period (typically between 3 p.m. and 6 p.m.) in which the greatest number of vehicle trips are generated by a given land use or are traveling on a given roadway. The ICUs represent volume-to-capacity ratios for the forecast volumes and the assumed intersection lane configurations.



LEGEND



Project Site Location



NORTH

NOT TO SCALE

Source: Austin Foust Associates, Inc., January 1996.

exhibit 5.2-1
Existing Circulation Plan

ANAHEIM SPORTS CENTER EIR



Michael Brandman Associates

19870001 • 1/96

The performance criteria for evaluating volumes and capacities on the street and highway system is summarized as follows:

Level of service (LOS) to be based on peak hour Intersection Capacity Utilization (ICU) values calculated using the following assumptions:

Saturation Flow Rate: 1,700 Vehicles Per Hour (VPH)
Clearance Interval: .05 of an ICU value

Levels of Service are as follows:

<u>Level of Service</u>	<u>Maximum ICU Value</u>
LOS A	.60
LOS B	.70
LOS C	.80
LOS D	.90
LOS E	1.00
LOS F	Above 1.00

As this summary indicates, a level of service (LOS) scale is used to evaluate intersection performance based on ICU values. The levels range from A to F, with LOS A representing free flow conditions and LOS F representing severe traffic congestion. Various operating LOS standards have been established which serve both as a guideline for evaluating observed traffic conditions and as a target or goal when evaluating future development plans and circulation system modifications. At the regional planning level, the statewide Congestion Management Program (CMP) specifies LOS E (peak hour ICU value less than or equal to 1.00) as the operating threshold for roadways and intersections on the CMP highway system. At the County and local level, the City of Anaheim and the Orange County Growth Management Program (GMP) have established LOS D (ICU value less than or equal to 0.90) as the worst acceptable level of service for peak hour intersection volumes.

Existing Intersections

The existing ICU values, based on existing lane configurations for the area surrounding the project site, are summarized in Table 5.2-1 and illustrated in Exhibit 5.2-2 (actual ICU calculations are included in Appendix C). As the ICU table indicates, the intersections in the vicinity of the project are operating at County and City acceptable levels of service during the a.m. and p.m. peak hours, with the exception of The City Drive and Chapman Avenue which is currently operating at LOS E during the a.m. and p.m. peak hours.

TABLE 5.2-1
ANAHEIM SPORTS CENTER—EXISTING ICU SUMMARY

Intersection ^a	A.M. Peak Hour	P.M. Peak Hour
104.Harbor & Katella	.52	.66
106.Harbor & Orangewood	.46	.60
108.I-5 SB Ramps & Freedman	.34	.52
123.Anahiem & Cerritos	.46	.73
124.Haster & Freedman	.47	.63
125.Haster & Katella	.73	.87
126.Haster & Orangewood	.49	.65
127.I-5 NB Ramps & Katella	.49	.77
145.Lewis & Ball	.56	.57
146.Lewis & Cerritos	.25	.31
147.Lewis & Katella	.39	.48
160.State College & Cerritos	.46	.51
161.State College & Katella	.50	.60
162.State College & Gene Autry	.38	.35
163.State College & Orangewood	.52	.58
176.SR-57 SB Ramps & Katella	.46	.45
177.SR-57 NB Ramps & Katella	.44	.43
301.Lewis & Chapman	.67	.76
302.City & Chapman	.99*	.96*
303.City & SR-22 WB Ramps	.66	.75
304.City & SR-22 EB Ramps	.67	.71
307.SR-57 SB Ramps & Orangewood	.48	.55
308.SR-57 NB Ramps & Orangewood	.50	.34
309.SR-57 SB Ramps & Chapman	.75	.68
310.SR-57 NB Ramps & Chapman	.50	.55
311.Main & Katella	.57	.59
312.Main & Collins	.49	.55
313.Main & Orangewood	.65	.60
314.Main & Chapman	.76	.79
315.Main & La Veta	.55	.80

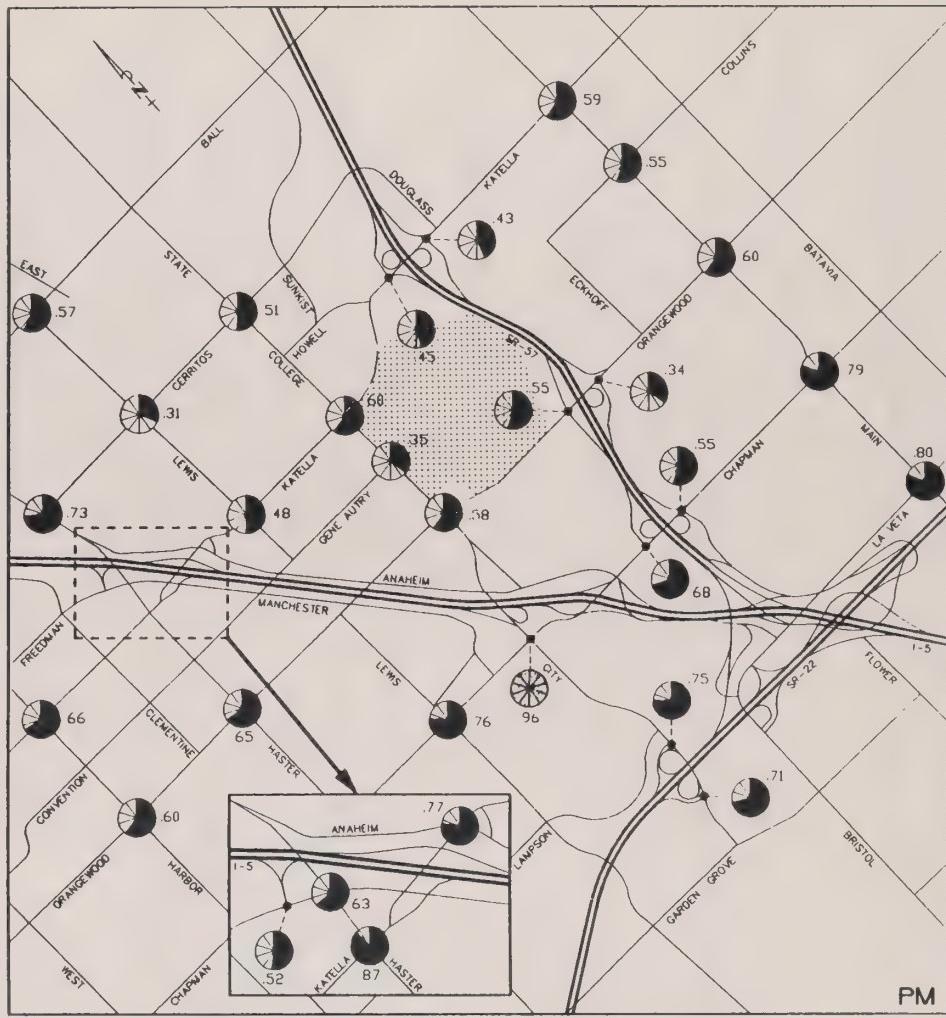
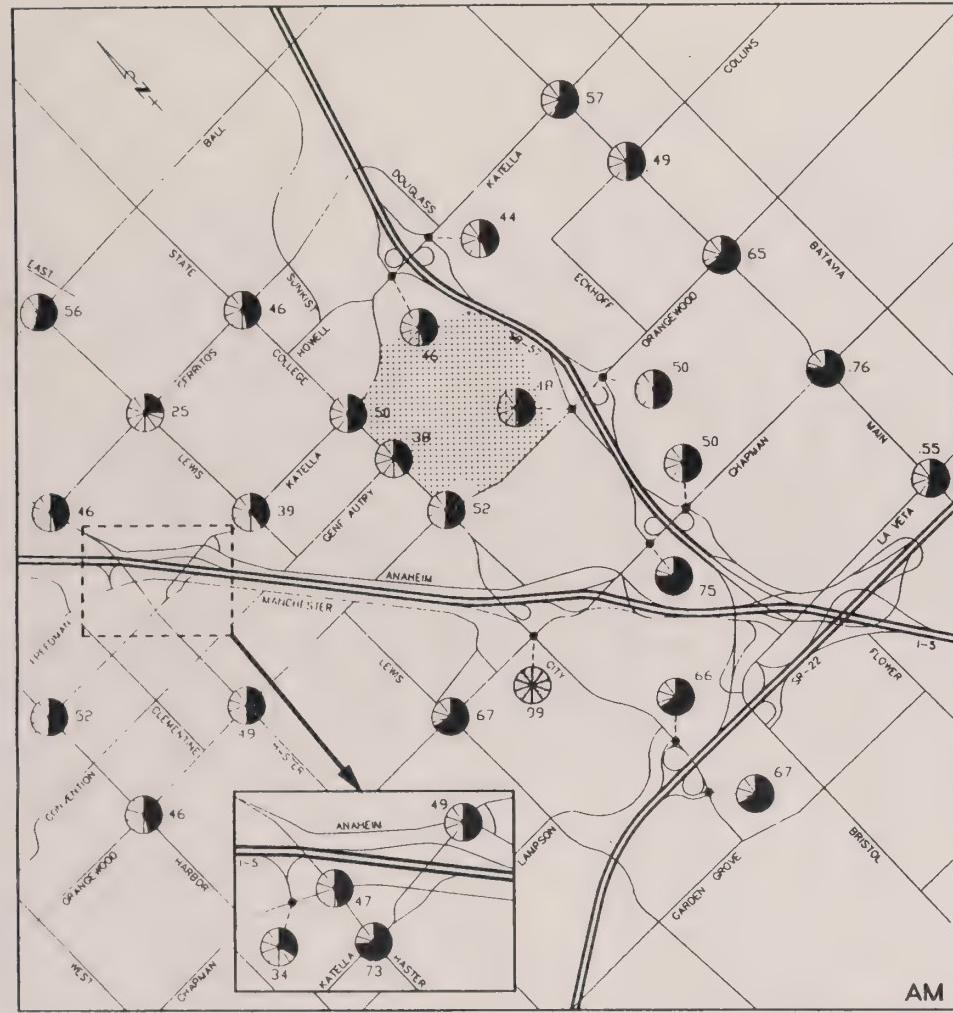
* Exceeds level of service "D"

Level of service ranges:

- .00 - .60 A
- .61 - .70 B
- .71 - .80 C
- .81 - .90 D
- .91 - 1.00 E
- Above 1.00 F

^a Number represents City intersection model number.

Source: Austin-Foust Associates, Inc., January 1996.



LEGEND

Project Site Location

A small, dark circular logo or seal is located in the bottom right corner of the page. It appears to be a standard institutional or library mark.

LOS A-D

LOSE

1

LOS F

Level of Service (LOS) Range:

LOS A .00-.60
LOS B .61-.70
LOS C .71-.80

LOS D .81-.90
LOS E .91-1.00
LOS F above 1.00



Source: Austin Foust Associates, Inc., January 1996.

Existing Intersection ICU Values

ANAHEIM SPORTS CENTER EIR



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exhibit 5.2-2

Short-Range (Year 2000)

The year 2000 No Project ICU values are summarized in Table 5.2-2 and illustrated in Exhibit 5.2-3. As Table 5.2-2 indicates, three intersections will operate at LOS E or worse under year 2000 No Project conditions: Lewis Street/Orangewood Avenue, City Drive/Chapman Avenue, and Main Street/Chapman Avenue.

Long-Range (Year 2010)

Year 2010 No Project ADT volumes are illustrated in Exhibit 5.2-4. The 2010 No Project ICU values are summarized in Table 5.2-3 and are illustrated in Exhibit 5.2-5. These ICU values are based on the planned 2010 circulation system (discussed below). As this table indicates, two intersections operate worse than LOS D during the a.m. peak hour (City Drive/Chapman Avenue and City Drive/SR-22 west ramps) and three intersections (City Drive/Chapman Avenue, City Drive/SR-22 west ramps, and Main Street/Chapman Avenue) operate at worse than LOS D during the p.m. peak hour under year 2010 No Project conditions.

Anaheim Traffic Analysis Model Assumptions

As previously noted, the traffic analysis for the Anaheim Sports Center was conducted using the Anaheim Traffic Analysis Model (ATAM). This model is a computerized trip generation assignment and distribution tool that evaluates various land use and circulation system schemes. This model does not include any special treatment for transit or other transportation demand management (TDM) strategies other than that implicit in the Institute of Transportation Engineers (ITE) trip generation rates. Therefore, the results of the ATAM for this traffic project would be conservative if any substantial portion of the contemplated regional transit and/or transportation demand management (TDM) plans are implemented. These plans include:

1. Orange County Major Investment Study for Urban Rail, Enhanced Bus, Transportation Systems Management, Freeway/Roadway (HOV), or No Build
2. Orange County Commuter Rail Study
3. SR-91 Freeway Widening and HOV Lanes
4. SR-57 Freeway Extension to I-405
5. Transit Way Interchange at Cerritos Avenue and SR-57

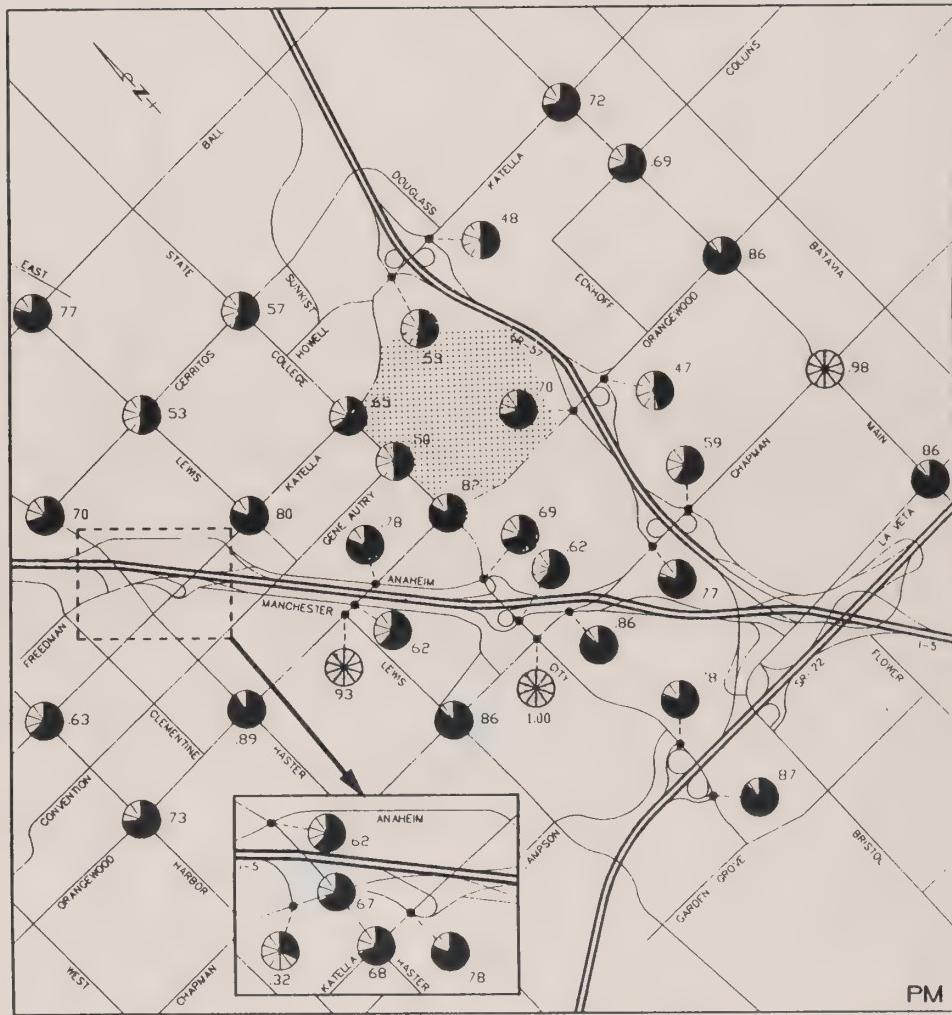
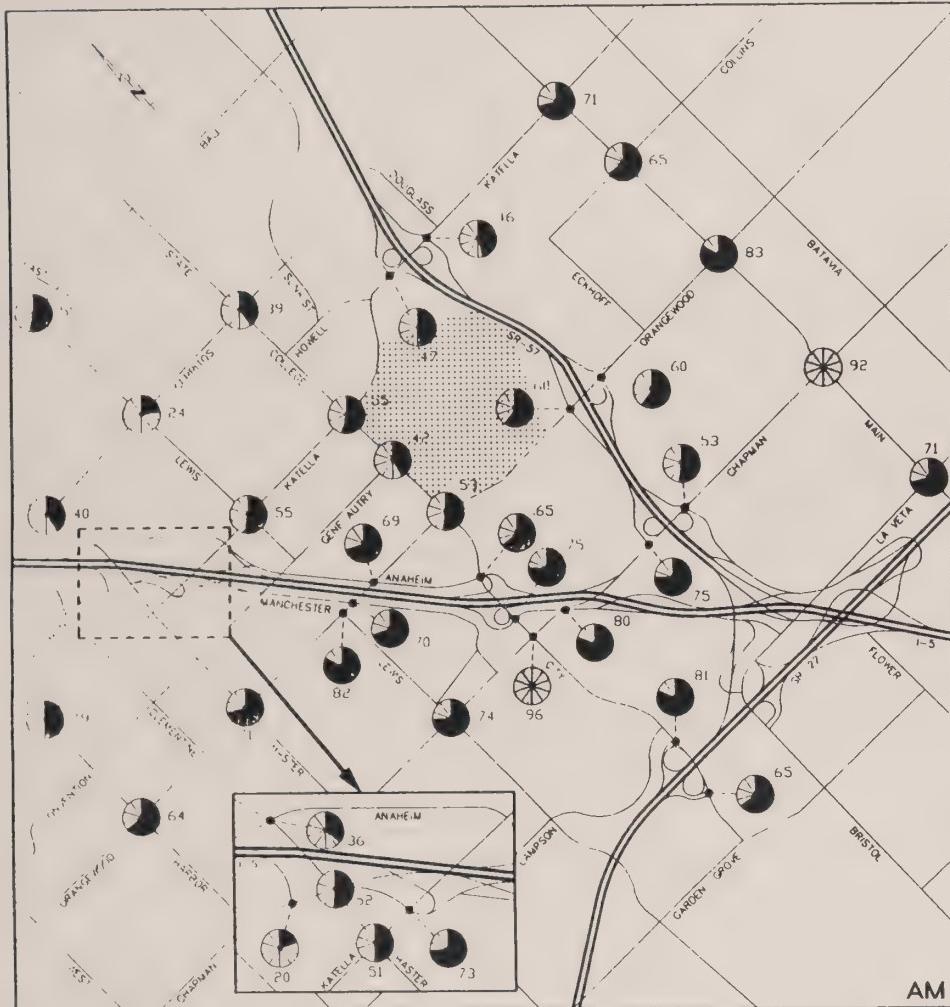
TABLE 5.2-2
YEAR 2000 NO PROJECT ICU SUMMARY

Intersection	Year 2000 No Project	
	A.M. Peak Hour	P.M. Peak Hour
104. Harbor & Katella	.49	.63
106. Harbor & Orangewood	.64	.73
108. I-5 SB Ramps & Freedman	.20	.32
123. Anaheim & Cerritos	.40	.70
124. Haster & Freedman	.52	.67
125. Haster & Katella	.51	.68
126. Haster & Orangewood	.71	.89
145. Lewis & Ball	.55	.77
146. Lewis & Cerritos	.24	.53
147. Lewis & Katella	.55	.80
160. State College & Cerritos	.39	.57
161. State College & Katella	.55	.65
162. State College & Gene Autry	.42	.50
163. State College & Orangewood	.53	.82
176. SR-57 SB Ramps & Katella	.47	.53
177. SR-57 NB Ramps & Katella	.46	.48
228. Anaheim & Haster	.36	.62
229. Freedman & Katella	.73	.78
244. Lewis & Orangewood	.82	.93*
245. Manchester & Orangewood	.70	.62
246. Anaheim & Orangewood	.69	.78
301. Lewis & Chapman	.74	.86
302. City & Chapman	.96*	1.00*
303. City & SR-22 WB Ramps	.81	.78
304. City & SR-22 EB Ramps	.65	.87
305. I-5 SB Ramps & Chapman	.80	.86
307. SR-57 SB Ramps & Orangewood	.60	.70
308. SR-57 NB Ramps & Orangewood	.60	.47
309. SR-57 SB Ramps & Chapman	.75	.77
310. SR-57 NB Ramps & Chapman	.53	.59
311. Main & Katella	.71	.72
312. Main & Collins	.65	.69
313. Main & Orangewood	.83	.86
314. Main & Chapman	.92*	.98*
315. Main & La Veta	.71	.86
316. State College & Anaheim	.65	.69
317. State College & I-5 SB Ramps	.75	.62

* Exceeds level of service "D"

Level of service ranges: .00 - .60 A
 .61 - .70 B
 .71 - .80 C
 .81 - .90 D
 .91 - 1.00 E
 Above 1.00 F

Source: Austin-Foust Associates, Inc., January 1996.



LEGEND



LOS A-D



LOS E



LOS F

Level of Service (LOS) Range:

LOS A .00-.60

LOS B .61-.70

LOS C .71-.80

LOS D .81-.90

LOS E .91-1.00

LOS F above 1.00



Source: Austin Foust Associates, Inc., January 1996.

exhibit 5.2-3
Year 2000 ICU Values-No Project

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LEGEND



Project Site Location



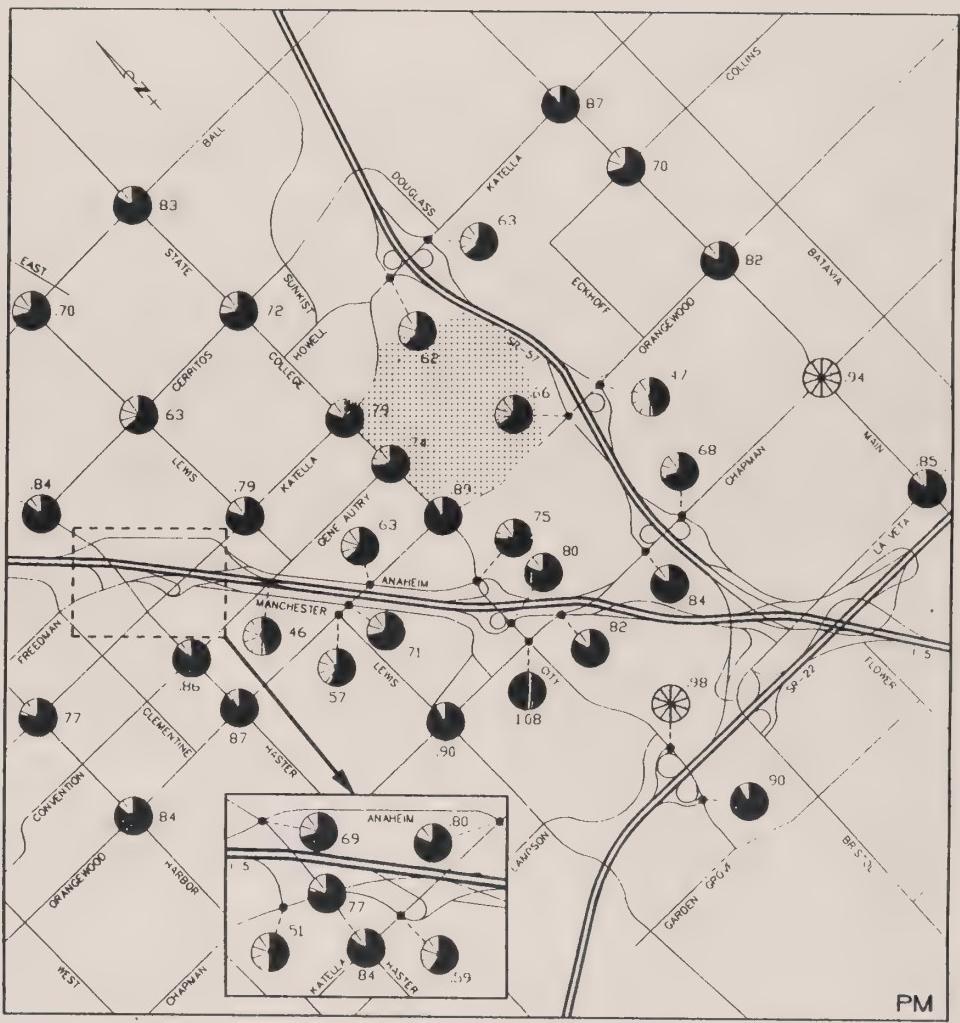
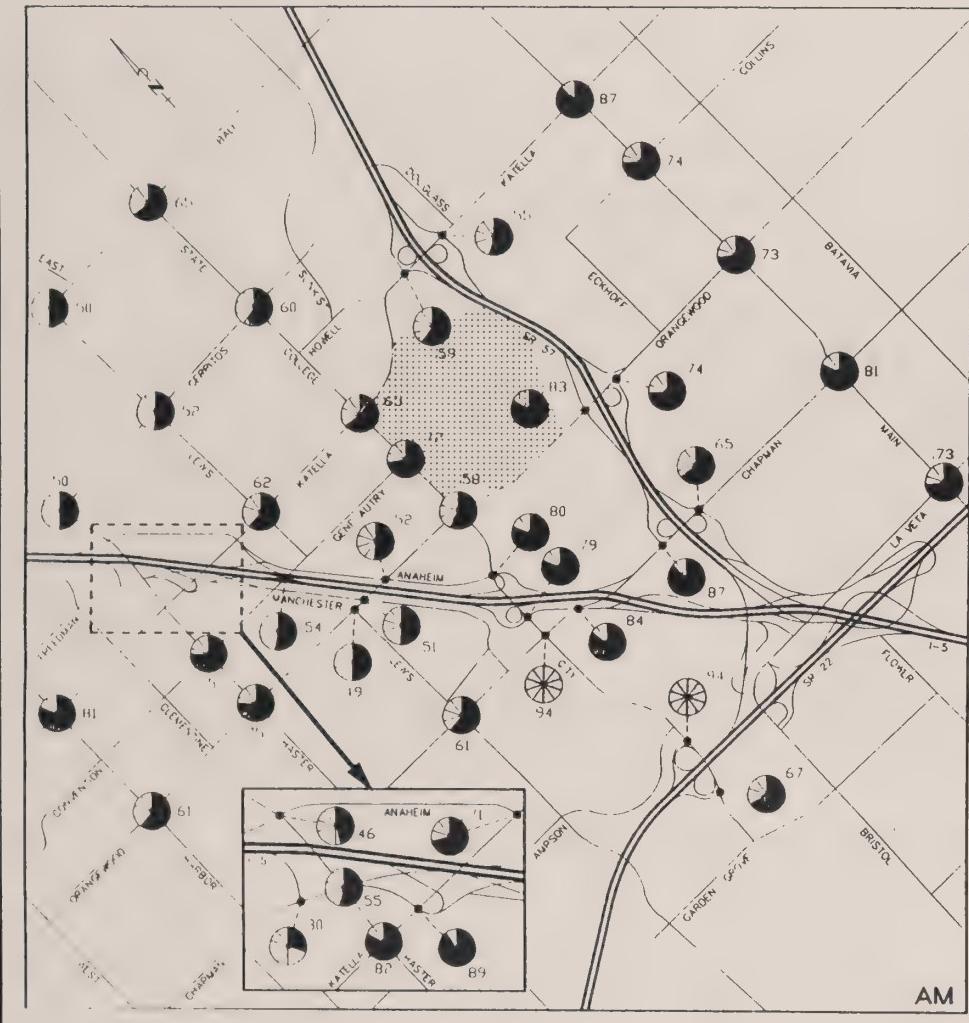
NOT TO SCALE

Source: Austin Foust Associates, Inc., January 1996.

exhibit 5.2-4

Year 2010 ADT Volumes (In Thousands)- No Project

ANAHEIM SPORTS CENTER EIR



LEGEND



Project Site Location



LOS A-D



LOS E



LOS F

Level of Service (LOS) Range:

LOS A .00-.60

LOS B .61-.70

LOS C .71-.80

LOS D .81-.90

LOS E .91-1.00

LOS F above 1.00



N

T

S

SOURCE: Austin Foust Associates, Inc., January 1996.



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exhibit 5.2-5
Year 2010 ICU Values-No Project

ANAHEIM SPORTS CENTER EIR

TABLE 5.2-3
YEAR 2010 NO PROJECT ICU SUMMARY

Intersection	Year 2010 No Project	
	A.M. Peak Hour	P.M. Peak Hour
104. Harbor & Katella	.81	.77
106. Harbor & Orangewood	.61	.84
108. I-5 SB Ramps & Freedman	.30	.51
123. Anaheim & Cerritos	.50	.84
124. Haster & Freedman	.55	.77
125. Haster & Katella	.82	.84
126. Haster & Orangewood	.75	.87
127. I-5 NB Ramps & Katella	.71	.80
145. Lewis & Ball	.50	.70
146. Lewis & Cerritos	.52	.63
147. Lewis & Katella	.62	.79
159. State College & Ball	.65	.83
160. State College & Cerritos	.60	.72
161. State College & Katella	.65	.79
162. State College & Gene Autry	.72	.74
163. State College & Orangewood	.58	.89
176. SR-57 SB Ramps & Katella	.59	.62
177. SR-57 NB Ramps & Katella	.55	.63
228. Anaheim & Haster	.46	.69
229. Freedman & Katella	.89	.59
242. Haster & Gene Autry	.75	.86
244. Lewis & Orangewood	.49	.57
245. Manchester & Orangewood	.51	.71
246. Anaheim & Orangewood	.52	.63
247. I-5 HOV Ramps & Gene Autry	.54	.46
301. Lewis & Chapman	.61	.90
302. City & Chapman	.94*	1.08*
303. City & SR-22 WB Ramps	.94*	.98*
304. City & SR-22 EB Ramps	.67	.90
305. I-5 SB Ramps & Chapman	.84	.82
307. SR-57 SB Ramps & Orangewood	.83	.66
308. SR-57 NB Ramps & Orangewood	.74	.47
309. SR-57 SB Ramps & Chapman	.87	.84
310. SR-57 NB Ramps & Chapman	.65	.68
311. Main & Katella	.87	.87
312. Main & Collins	.74	.70
313. Main & Orangewood	.73	.82
314. Main & Chapman	.81	.94*
315. Main & La Veta	.73	.85
316. State College & Anaheim	.80	.75
317. State College & I-5 SB Ramps	.79	.80

* Exceeds level of service "D"

Level of service ranges: .00 - .60 A

.61 - .70 B

.71 - .80 C

.81 - .90 D

.91 - 1.00 E

Above 1.00 F

Source: Austin-Foust Associates, Inc., January 1996.

6. Anaheim Stadium Metrolink/Amtrak Rail Station Improvement Project
7. Amtrak Commuter Rail Feasibility Study
8. I-5 "Intelligent Transportation Systems"—Radio Advisory and Changeable Message Signs
9. SR-57/State College Boulevard "Smart Corridor"—Radio Advisory, Changeable Message Signs, and Closed Circuit Television Cameras

Other more conventional regional arterial and highway improvements such as the Katella Avenue and Harbor Boulevard "Smart Street" project are included in the ATAM. "Smart Streets" are arterial highways which are planned to be improved to provide increased capacity and enhanced traffic flow.

In addition, considerable interest and speculation continue to surround the potential future extension of the SR-57 from I-5 southerly to connect to I-405 and SR-73. The ATAM does not include this segment of roadway either as a freeway, conventional arterial, or toll road.

If any or all of these regional improvements occur, they could make a substantial contribution towards reducing the levels of traffic otherwise predicted by the ATAM for the Anaheim circulation system. In the absence of reasonable foreseeable commitments to funding and implementation of those regional improvements, they have not been included in the ATAM for the following analysis of the Anaheim Sports Center area. However, a number of these regional improvements have considered the project site as a major access point or transportation hub within the region.

Future Baseline Traffic Conditions Without Project

Short- and long-range volume projections in the vicinity of the project were taken from the year 2000 and 2010 versions of the ATAM. Traffic forecasts produced by the ATAM for future years reflect estimated levels of additional development within the City of Anaheim, as well as regional growth outside of the City.

The ATAM land use database previously assumed development buildout (2,118,480 square feet of office space) on the project site. This land use database was used for the year 2000 and year 2010 baseline analysis.

Existing Parking

A total of 16,000 parking spaces are located onsite to serve existing uses. Parking capacity is adequate to serve existing uses.

5.2.2 ENVIRONMENTAL IMPACTS

This section describes the land use and trip generation characteristics associated with the development of the Anaheim Sports Center. Additionally, this section describes the forecast future traffic conditions for the project area with development of the Anaheim Sports Center in the year 2000 and the year 2010.

Thresholds of Significance

The Anaheim Sports Center project would have a significant traffic impact if:

- State CMP highway roadways and intersections operate at greater than or equal to a peak hour ICU of 1.0 (LOS E).
- A County or City intersection operates at greater than or equal to a peak hour ICU of 0.90 (LOS D).
- The project increases the deficiency by greater than 0.10 at an intersection which reaches LOS F under base conditions (source: Orange County CMP).
- Parking needs exceed 100 hundred percent occupancy of the available onsite and offsite parking.

Project Trip Generation

Trip generation rates were derived for a typical weekday. The rates for the office space and hotels were taken from the ATAM. The trip generation rates for the urban entertainment/retail uses were derived from trip rates for various recreational uses, including restaurant, movie theater, bowling alley, recreational community center, and specialty retail from the ITE and commercial recreation from the ATAM.

The land use assumptions for the site in the General Plan and ATAM based on previously planned development consists of 2,118,480 square feet of office space. A comparison of the previously planned land use trip generation and the proposed project trip generation is presented in Table 5.2-4.

As this trip generation comparison indicates, the proposed project will generate 9,109 more trips daily than the ATAM land use assumptions. During the a.m. peak hour, the proposed project will generate 1,621 fewer trips than projected for previous planned uses and during the p.m. peak hour, the proposed project will generate 499 more trips.

TABLE 5.2-4
PROPOSED PROJECT TRIP GENERATION SUMMARY

Land Use	Units	A.M. Peak Hour			P.M. Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Trip Rate								
Entertainment Retail ^a		.47	.27	.74	1.35	2.13	3.48	30.75
Hotel ^b		.32	.37	.69	.43	.34	.77	9.45
Office ^a		1.84	.23	2.07	.35	1.70	2.05	15.33
Proposed Project Trip Generation								
Entertainment Retail	750 TSF	353	203	555	1,013	1,598	2,610	23,063
Hotel	500 Room	160	185	345	215	170	385	4,725
Office	900 TSF	1,656	207	1,863	315	1,530	1,845	13,797
Total^c		2,169	595	2,764	1,543	3,298	4,841	41,585
Trip Generation for Previous Entitled Land Use								
Office	2,118.48 TSF	3,898	487	4,385	741	3,601	4,342	32,476
^a Per 1,000 square feet (TSF). ^b Per room. ^c Numbers have been rounded accordingly.								
Source: Austin-Foust Associates, Inc., January 1996.								

Although a "plan to plan" comparison is not appropriate for assessing project impacts, it is important to determine the level of traffic anticipated beyond the previously planned development intensity. Development planned for the stadium area has been previously analyzed and impacts associated with that level of development are well documented. This comparison is given for information only and is not the basis for the assessment of project impacts.

Short-range Traffic Impacts (Year 2000)

To determine the year 2000 with project ICU values, the ATAM for year 2000 was revised to eliminate the previously proposed land use (2,118,480 square feet of office) on the site, and was replaced by the square footage of the proposed Anaheim Sports Center to obtain traffic volumes anticipated with development of the proposed project. The amount of development of the Anaheim Sports Center by the year 2000 was assumed to be half the project buildout development; therefore, the project's year 2000 impacts are estimated to be approximately half the incremental increase in the ICU value as a result of the proposed project under year 2010 conditions (see below). The year 2000 No Project and With Project ICU values are summarized in Table 5.2-5 and year 2000 With Project ICU values are illustrated on Exhibit 5.2-6. As Table 5.2-5 indicates, three intersections will operate at LOS E or worse: Lewis and Orangewood (intersection 244), The City Drive and Chapman Avenue (intersection 302), and Main Street and Chapman Avenue (intersection 314). However, these three intersections will operate at an unacceptable level of service with or without the proposed project. Therefore, the project has no significant impact on any of the study intersections during the a.m. or p.m. peak hour under short-range conditions.

Long-range Traffic Impacts (Year 2010)

To determine the year 2010 With Project ICU values, the ATAM for the year 2010 was revised to eliminate the previously approved land use (2,118,480 square feet of office) on the site, and was replaced by the buildout of the square footage of the proposed Anaheim Sports Center to obtain volumes with the proposed project. Exhibit 5.2-7 illustrates year 2010 With Project ADT volumes. The year 2010 No Project and With Project ICU values are summarized in Table 5.2-6 and year 2010 With Project ICU values are illustrated on Exhibit 5.2-8. Two intersections operate at worse than LOS D during the a.m. peak hour.

- The City Drive and Chapman Avenue (intersection 302).
- The City Drive and SR-22 westbound ramps (intersection 303) under year 2010 No Project Conditions.

Three intersections operate at worse than LOS D during the p.m. peak hour under Year 2010 No Project conditions.

- The City Drive and Chapman Avenue.
- The City Drive and SR-22.
- Westbound Ramps.
- Main Street and Chapman Avenue.

TABLE 5.2-5
YEAR 2000 ICU SUMMARY

Intersection	2000 No Project		2000 With Project	
	A.M. ^a	P.M. ^b	A.M.	P.M.
104. Harbor & Katella	.49	.63	.49	.63
106. Harbor & Orangewood	.64	.73	.64	.73
108. I-5 SB Ramps & Freedman	.20	.32	.20	.32
123. Anaheim & Cerritos	.40	.70	.40	.70
124. Haster & Freedman	.52	.67	.52	.67
125. Haster & Katella	.51	.68	.50	.68
126. Haster & Orangewood	.71	.89	.70	.89
145. Lewis & Ball	.55	.77	.55	.77
146. Lewis & Cerritos	.24	.53	.24	.53
147. Lewis & Katella	.55	.80	.54	.80
160. State College & Cerritos	.39	.57	.38	.57
161. State College & Katella	.55	.65	.54	.65
162. State College & Gene Autry	.42	.50	.45	.55
163. State College & Orangewood	.53	.82	.51	.80
176. SR-57 SB Ramps & Katella	.47	.53	.44	.54
177. SR-57 NB Ramps & Katella	.46	.48	.45	.48
228. Anaheim & Haster	.36	.62	.36	.62
229. Freedman & Katella	.73	.78	.73	.78
244. Lewis & Orangewood	.82	.93*	.81	.93*
245. Manchester & Orangewood	.70	.62	.68	.63
246. Anaheim & Orangewood	.69	.78	.67	.78
301. Lewis & Chapman	.74	.86	.74	.86
302. City & Chapman	.96*	1.00*	.96*	1.00*
303. City & SR-22 WB Ramps	.81	.78	.79	.78
304. City & SR-22 EB Ramps	.65	.87	.64	.87
305. I-5 SB Ramps & Chapman	.80	.86	.80	.86
307. SR-57 SB Ramps & Orangewood	.60	.70	.57	.70
308. SR-57 NB Ramps & Orangewood	.60	.47	.60	.48
309. AE-57 SB Ramps & Chapman	.75	.77	.75	.77
310. SR-57 NB Ramps & Chapman	.53	.59	.53	.59
311. Main & Katella	.71	.72	.71	.72
312. Main & Collins	.65	.69	.65	.69
313. Main & Orangewood	.83	.86	.83	.86
314. Main & Chapman	.92*	.98*	.92*	.98*
315. Main & La Veta	.71	.86	.71	.86
316. State College & Anaheim	.65	.69	.64	.70
317. State College & I-5 SB Ramps	.75	.62	.74	.63

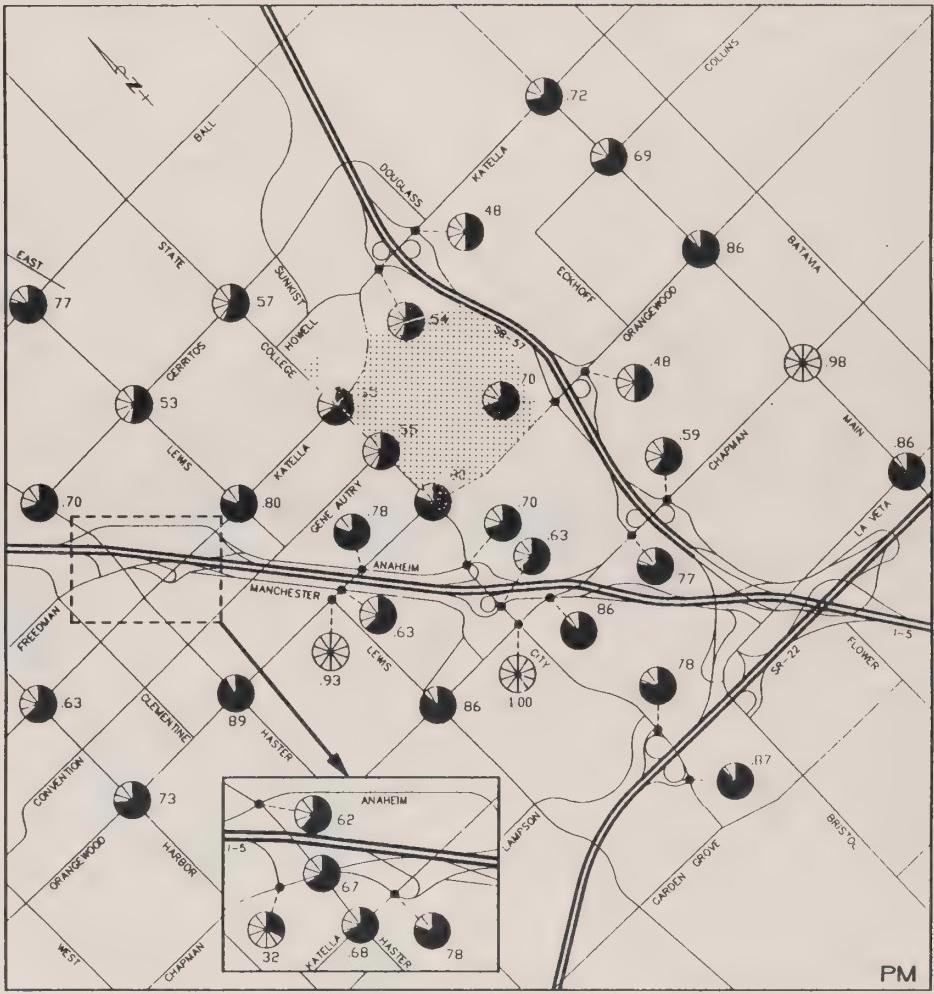
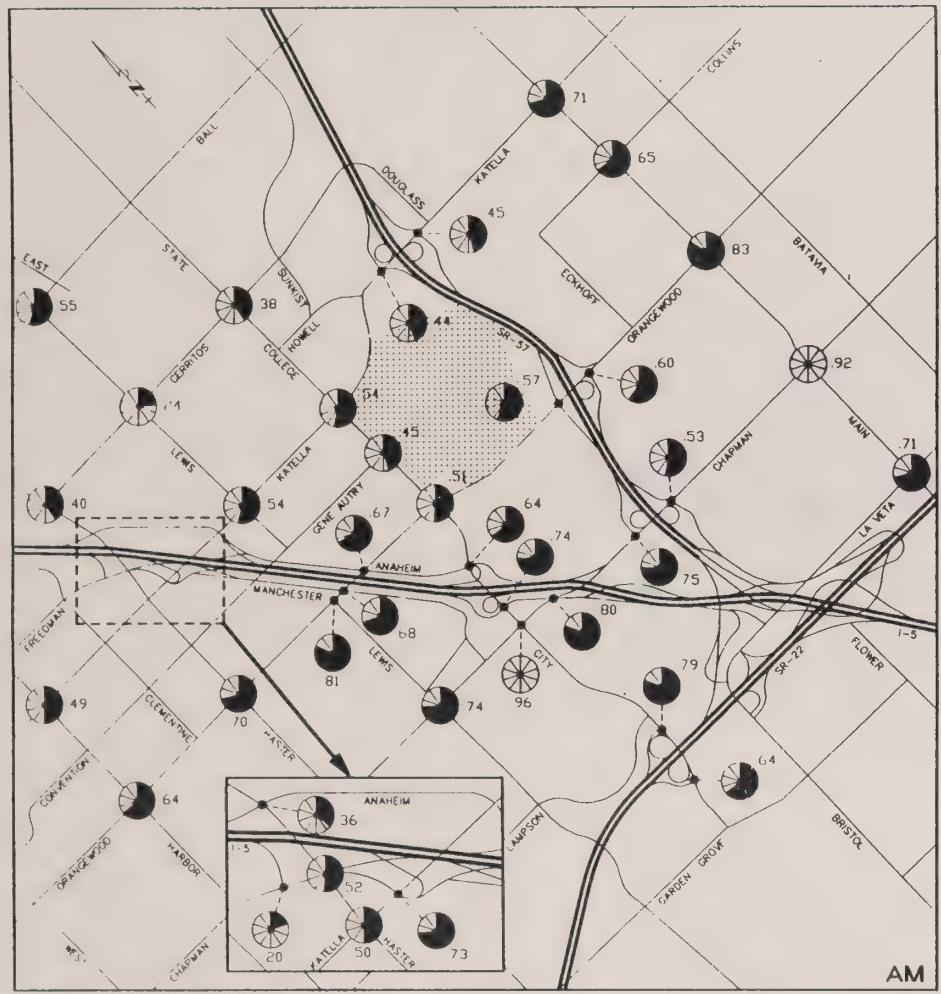
* Exceeds level of service "D"

^a Peak hour.

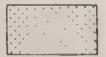
Level of service ranges:

- .00 - .60 A
- .61 - .70 B
- .71 - .80 C
- .81 - .90 D
- .91 - 1.00 E
- Above 1.00 F

Source: Austin-Foust Associates, Inc., January 1996.



LEGEND



Project Site Location



LOS A-D



LOS E



LOS F

Level of Service (LOS) Range:

LOS A .00-.60
LOS B .61-.70
LOS C .71-.80

LOS D .81-.90
LOS E .91-1.00
LOS F above 1.00



Source: Austin Foust Associates, Inc., January 1996.

exhibit 5.2-6
Year 2000 ICU Values-With Project



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LEGEND



Project Site Location



NORTH

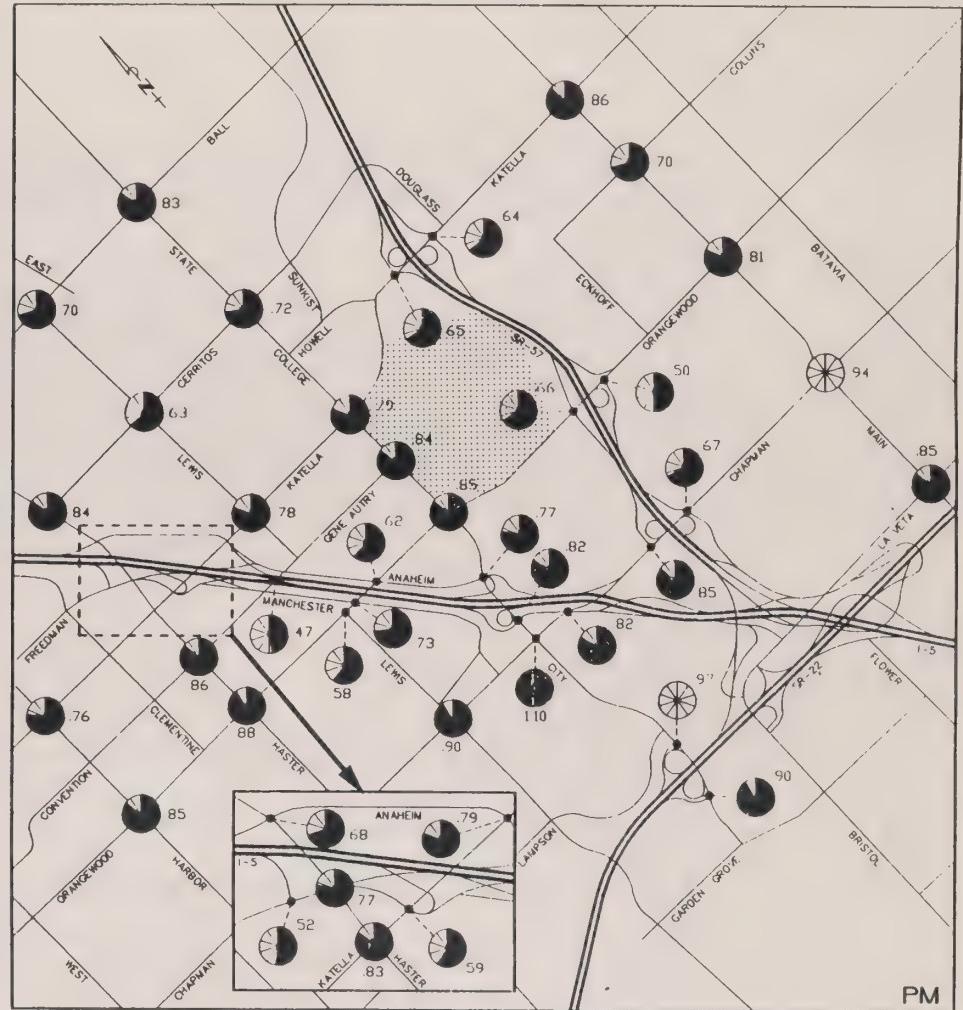
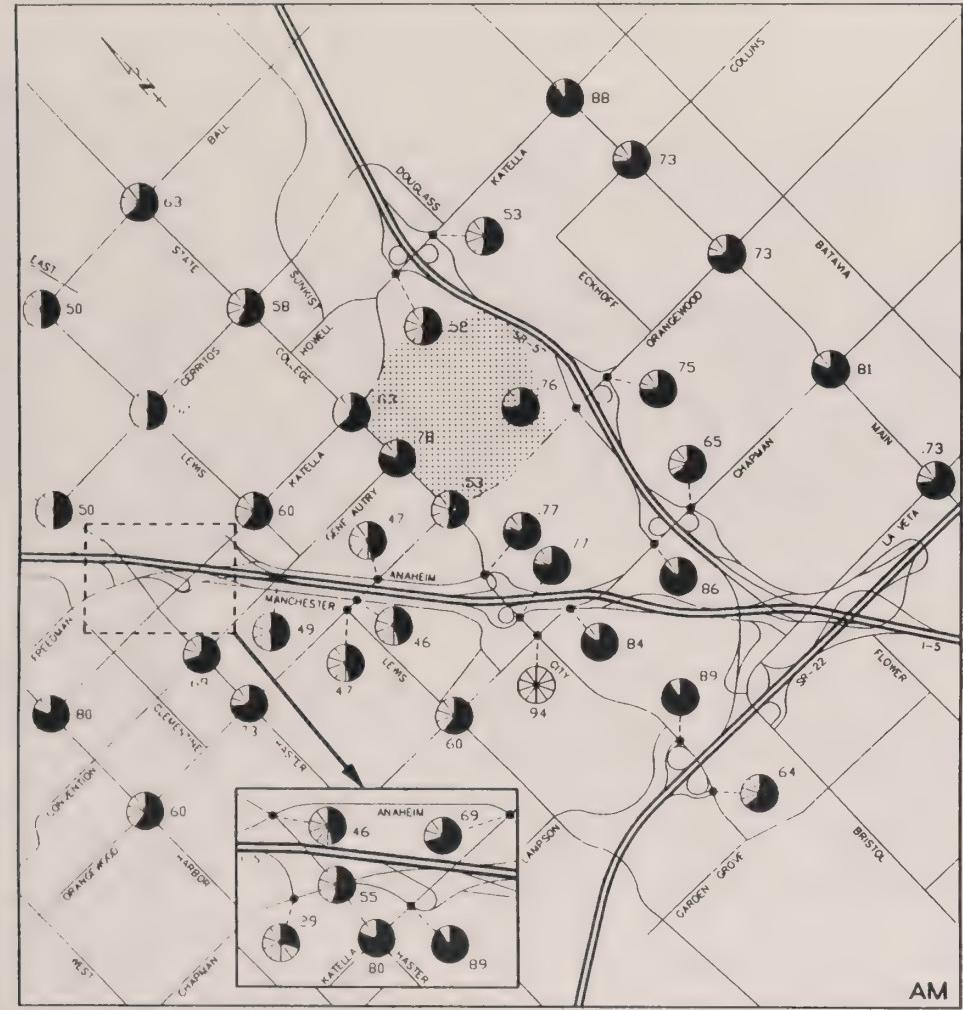
NOT TO SCALE

Source: Austin Foust Associates, Inc., January 1996.

exhibit 5.2-7

Year 2010 ADT Volumes (In Thousands)-With Project

ANAHEIM SPORTS CENTER EIR



LEGEND



Project Site Location



LOS A-D



LOSE



LOS F

Level of Service (LOS) Range:

LOS A .00-.60

LOS B .61-.70

LOS C 71-80

LOS D 81-90

LOS E 91-1.00

LOS E above 1.00

NTS
NORTH

Source: Austin Foust Associates, Inc., January 1996.

exhibit 5.2-8

ANAHEIM SPORTS CENTER FIB



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TABLE 5.2-6
YEAR 2010 ICU SUMMARY

Intersection	2010 No Project		2010 With Project	
	A.M. ^a	P.M. ^a	A.M.	P.M.
104. Harbor & Katella	.81	.77	.80	.76
106. Harbor & Orangewood	.61	.84	.60	.85
108. I-5 SB Ramps and Freedman	.30	.51	.29	.52
123. Anaheim & Cerritos	.50	.84	.50	.84
124. Haster & Freedman	.55	.77	.55	.77
125. Haster & Katella	.82	.84	.80	.83
126. Haster & Orangewood	.75	.87	.73	.88
127. I-5 NB Ramps & Katella	.71	.80	.69	.79
145. Lewis & I Ball	.50	.70	.50	.70
146. Lewis & Cerritos	.52	.63	.52	.63
147. Lewis & Katella	.62	.79	.60	.78
159. State College & Ball	.65	.83	.63	.83
160. State College & Cerritos	.60	.72	.58	.72
161. State College & Katella	.65	.79	.63	.79
162. State College & Gene Autry	.72	.74	.78	.84
163. State College & Orangewood	.58	.89	.53	.85
176. SR-57 SB Ramps & Katella	.59	.62	.52	.65
177. SR-57 NB Ramps & Katella	.55	.63	.53	.64
228. Anaheim & Haster	.46	.69	.46	.68
229. Freedman & Katella	.89	.59	.89	.59
242. Haster & Gene Autry	.75	.86	.69	.86
244. Lewis & Orangewood	.49	.57	.47	.58
245. Manchester & Orangewood	.51	.71	.46	.73
246. Anaheim & Orangewood	.52	.63	.47	.62
247. I-5 HOV Ramps & Gene Autry	.54	.46	.49	.47
301. Lewis & Chapman	.61	.90	.60	.90
302. City & Chapman	.94*	1.08*	.94*	1.10*
303. City & SR-22 WB Ramps	.94*	.98*	.89	.97*
304. City & SR-22 EB Ramps	.67	.90	.64	.90
305. I-5 SB Ramps & Chapman	.84	.82	.84	.82
307. SR-57 SB Ramps & Orangewood	.83	.66	.76	.66
308. SR-57 NB Ramps & Orangewood	.74	.47	.75	.50
309. SR-57 SB Ramps & Chapman	.87	.84	.86	.85
310. SR-57 NB Ramps & Chapman	.65	.68	.65	.67
311. Main & Katella	.87	.87	.88	.86
312. Main & Collins	.74	.70	.73	.70
313. Main & Orangewood	.73	.82	.73	.81
314. Main & Chapman	.81	.94*	.81	.94*
315. Main & La Veta	.73	.85	.73	.85
316. State College & Anaheim	.80	.75	.77	.77
317. State College & I-5 SB Ramps	.79	.80	.77	.82

* Exceeds level of service "D"

^a Peak hour.

Level of service ranges:

.00 - .60	A
.61 - .70	B
.71 - .80	C
.81 - .90	D
.91 - 1.00	E
Above 1.00 F	

Source: Austin-Foust Associates, Inc., January 1996.

The City Drive and Chapman Avenue intersection and the Main Street and Chapman Avenue intersection also operate at unacceptable levels of service in the year 2010. As shown on Table 5.2-6, under With Project conditions, one intersection during the a.m. peak hour and three intersections during the p.m. peak hour operate at worse than LOS D.

The project causes a 0.02 increase in the p.m. peak hour ICU at State College Boulevard and Chapman Avenue, which operates at 1.08 in year under 2010 without the project. Since the increase is below the CMP threshold of a 0.10 increase in the ICU value at an intersection which reaches LOS F under base case conditions, the proposed Anaheim Sports Center has no significant long-term traffic impacts.

Parking

A total of 14,000 parking spaces have been identified onsite to accommodate the demands of the Anaheim Sports Center. Parking for nonevent (no major league football or baseball game) will be handled onsite with the 14,000 spaces. The Metrolink Commuter rail/Amtrak station would share 300 of these spaces with the proposed project.

A major portion of the parking availability will be shared by the various users. Shared parking for this project is based on the following concepts: (1) spaces which accommodate one use at a certain time of the day and another use at a different time (office parking during the day and game parking at night), and (2) a reduction in the number of parking spaces needed due to onsite capture of more than one activity (dinner and the ballgame or ballgame and a nightclub).

An assessment of this shared use was prepared based on the Urban Land Institute's (ULI) shared use parking model supplemented by estimates of the stadium's and entertainment retail's shared use. Three typical design event scenarios were analyzed: one for a typical weekday with a major daytime stadium event (i.e., 1 p.m. baseball game with a maximum 67 percent attendance), one for a typical weekday evening stadium event (i.e., a baseball game at 7:05 p.m. with 85 percent attendance), and one for a Sunday with a major stadium event (i.e., a football game at 1 p.m. with 85 percent attendance). The results reveal that based on anticipated peak usages (i.e., no sharing of parking), a total of up to 19,458 parking spaces may be required on a weekday (during the evening) and 26,076 spaces on a Sunday game day. These figures include an estimate of the entertainment retail's peak usage. On a weekday afternoon game day (based on an anticipated crowd of 30,000), parking spaces are expected to be needed, of which 14,000 can be accommodated onsite, requiring approximately 66 spaces offsite. When compared with the supply of 14,000 onsite parking spaces available, it appears that a substantial onsite parking deficiency will occur on weekday evening and weekend gamedays with

no sharing of parking. This does not mean to imply an overall parking deficiency is anticipated. On the contrary when available offsite parking is considered, a substantial surplus of parking is anticipated. For example, the weekday evening game indicates a peak demand of 14,815 spaces to be occupied during a game, 14,000 of which can be accommodated onsite; therefore, an additional 815 spaces must be made available offsite. Moreover, on a Sunday game day, the shared parking analysis indicates that 20,667 spaces will be occupied during the game. Since 14,000 of these vehicles can be accommodated onsite, an additional 6,667 spaces would need to be made available offsite. Several locations in the vicinity of the project site have large parking facilities which could be used during those times in which major sporting events take place. More specifically, approximately 7,950 spaces are available during weekday evenings and weekends. For special sporting events, such as a Super Bowl or World Series, additional offsite parking (15,342 spaces) would be made available at The Arrowhead Pond of Anaheim, provided no event is schedule at the Pond. To ensure no significant impacts would occur related to parking, agreements would need to be established with the owners and operators of these facilities to obtain the necessary parking spaces required during weekday evening and weekend game days. No significant impacts to parking availability are expected to occur with development of the project.

Shuttle Bus Operations

Because the project would require a certain number of offsite spaces (The Arrowhead Pond of Anaheim, office parking structures, etc.), during major stadium events, transport between the Anaheim Sports Center and offsite parking is essential. Shuttle transport is proposed to travel from the parking areas, Anaheim Stadium, the new stadium, and the entertainment/retail area in a loop fashion. More specifically, the project proposes a separate bus-only lane into/out of the site at each entrance to facilitate the ingress and egress of shuttle buses. This bus-only lane will be reversible so that, prior to a major stadium event, the bus-only lane would allow entry by the shuttle buses which will exit via a general purpose exit lane. After a major stadium event, the bus-only lane becomes an exit lane and shuttle buses would re-enter the site via a general purpose entry lane.

The shuttle would continue to operate throughout the games or other major events so that people do not feel hampered, without the ability to leave the stadium area early.

Site Access and Circulation

Primary regional access to the site will be from I-5, just west of the project area and from SR-57 directly adjacent to the site on the east.

Direct access to the Anaheim Sports Center will be available from all four sides of the project, with all access points merging into the ring road at the center of the site surrounding the existing Anaheim Stadium. The main entry to the Anaheim Sports Center will be from State College Boulevard along Gene Autry Way from the west, as with the existing configuration of the site. Northern access will be from Katella Avenue which will be the primary access for the Metrolink/Amtrak Station and the office towers. The Katella Avenue access is currently operated as an employee entrance. With the development of the Barclay property to the north, this access point is planned to be signalized. Since the project would utilize this point as an entrance to the site, the project owners/developer will be required to pay its fair share in the signalization of this intersection. Access from the east will be via Douglass Road (proposed to be changed to Gene Autry Way East). Douglass Road is also the primary link between the project and The Pond. Southern access will be from Orangewood Avenue. Entrances to the project site are shown in Exhibit 3-3, Project Site Plan.

During nonevent periods, access to any part of the project site will be provided from all four entrances via the ring road. During major events, it is proposed that portions of the ring road be closed to traffic to provide for pedestrian movement from the parking areas across the ring road to the stadium where the game is taking place. This will promote easy and efficient parking flow pre- and post-games with parking attendants directing traffic to parking to the area closest to the entrance used to access the site without a need for use of the ring road. Cars will be required to leave at the same point they accessed the site without people attempting the drive around the ring road. Parking sectors will be distinct and separate. A final parking management plan will be required for event management in order to facilitate traffic flow on and offsite.

Construction

There are four categories of offsite vehicle trips associated with construction of future developments and public infrastructure improvements associated with the Anaheim Sports Center: employee trips, truck deliveries, dirt truck trips, and demolition debris truck trips. The trips will take place over the 5- to 15-year time frame of project development. The majority of construction work will generally begin at 7:00 a.m. to 7:30 a.m. and end at approximately 3 p.m. (with workers leaving between 3 p.m. and 4 p.m., thus reducing the number of construction related trips that will occur by employment activity during the p.m. peak hour (5 p.m. to 6 p.m.). Quantification of the number of construction trips associated with future development within the Anaheim Sports Center would be highly speculative; however, it is anticipated that the eventual number of construction trips made within the project area could be significant if proper mitigation is not provided.

5.2.3 CUMULATIVE IMPACTS

The study area for cumulative effects to traffic is the area generally bounded by Harbor Boulevard, Ball Road, Main Street, and SR-22.

The year 2000 and year 2010 With Project ICU values identified in Section 5.2.2 used the ATAM for year 2000 and year 2010. The ATAM reflects estimated levels of additional development within the City of Anaheim, as well as regional growth outside of the City and the proposed development. Therefore, the cumulative traffic ICU values would be that same as those summarized in Tables 5.2-5 and 5.2-6 under the With Project scenarios. As indicated in these tables, three intersections are forecast to operate at an unacceptable LOS E or worse in both year 2000 and year 2010. However, it is anticipated that implementation of planned circulation improvements, such as those identified in section 5.2.1 above, will at a minimum, maintain existing levels of service.

5.2.4 MITIGATION MEASURES

Construction

Mitigation Measure 2-1. Prior to the issuance of grading permits for each project development forecast to generate 100 or more peak hour trips, as determined by the City Traffic and Transportation Manager utilizing Anaheim Traffic Analysis Model Trip Generation Rates, the property owner/developer shall prepare a trip reduction plan for construction crew vehicles subject to the review and approval of the City Traffic and Transportation Manager, to reduce potential vehicle trips on the road and identify parking locations for construction employees and equipment.

Long-Term

Although no long-term project traffic impacts are identified, the following measures will help reduce the trips to and from the project site:

Mitigation Measure 2-2. Prior to final building and zoning inspection; and, ongoing during project operation, the property owner/developer shall implement and administer a comprehensive Transportation Demand Management (TDM) program for all employees. Objectives of the TDM program shall be to increase ridesharing and use of alternative transportation modes by guests and provide a menu of commute alternatives for employees to reduce project-generated trips.

A menu of TDM program strategies and elements for both existing and future employee commute options include, but are not limited to, the following:

- Onsite Service. Onsite services, such as the food, retail, and other services be provided.
- Ridesharing. A computer listing of all employee members be developed for the purpose of providing a "matching" of employees with other employees who live in the same geographic areas and who could rideshare.
- Vanpooling. A computer listing of all employees for the purpose of matching numbers of employees who live in geographic proximity to one another and could comprise a vanpool or participate in the existing vanpool programs.
- Transit Pass. Southern California Rapid Transit District and Orange County Transportation Authority (including commute rail) passes be promoted through financial assistance and onsite sales to encourage employees to use the various transit and bus services from throughout the region.
- Commuter Bus. As commuter "express" bus service expands throughout the region, passes for use on these lines may be provided for employees who choose to use this service. Financial incentives for these employees could be provided.
- Shuttle Service. A computer listing of all employees living in proximity to the project be generated, and a local shuttle program offered to encourage employees to travel to work by means other than the automobile. Event shuttle service will be available for the guests.
- Bicycling. A bicycling program be developed to offer a bicycling alternative to employees. Secure bicycle racks, lockers, and showers be provided as part of this program. Maps of bicycle routes throughout the area be provided to inform potential bicyclists of these options. Bicycle lanes will be provided along the internal ring road.
- Rental Car Fleet. A private "fleet vehicle" program be developed to provide employees who travel to work by means other than an automobile with access to automobiles in case of emergency, medical appointments, etc. This service would help employees use alternative modes of transportation by ensuring that they would be able to have personal transportation in the event of special circumstances.
- Guaranteed Ride Home Program. A program to provide employees who rideshare, or use transit or other means of commuting to work, with a prearranged ride home in a taxi, rental car, shuttle, or other vehicle, in the event of emergencies during the work shift.

- Target Reduction of Longest Commute Trip. An incentives program for ridesharing and other alternative transportation modes to put highest priority on reduction of longest employee commute trips.
- Stagger shifts.
- Develop a "compressed work week" program, which provides for fewer work days but longer daily shifts as an option for employees.
- Explore the possibility of a "telecommuting" program that would link some employees via electronic means (e.g., computer with modem).
- Develop a parking management program that provides incentives to those who rideshare or use transit means other than single-occupant auto to travel to work.
- Access. Preferential access to high occupancy vehicles, shuttles, and guests for egress purposes may be provided.
- Financial Incentive for Ridesharing and/or Public Transit. (Currently, federal law provides tax-free status for up to \$60 per month per employee contributions to employees who vanpool or use public transit, including commuter rail and/or express bus pools.)
- Financial Incentive for Bicycling. Employees offered financial incentives for bicycle to work.
- Special "Premium" for the Participation and Promotion of Trip Reduction. Ticket/passes to special events, vacations, etc. be offered to employees who recruit other employees for vanpool, carpool, or other trip reduction programs.
- Actively recruit prospective employees residing within a 30-minute commute shed.
- Design incentive program for carpools and other alternative transportation modes so as to put highest priority on reduction of longest commute trips.

Mitigation Measure 2-3. Prior to final building and zoning inspections, the property owner/developer shall join and financially participate in a clean fuel shuttle program, if established; and, shall participate in the Anaheim Transportation Network/Transportation Management Association in conjunction with the ongoing operation of the project.

Mitigation Measure 2-4. Prior to the issuance of the first building permit, appropriate Traffic Signal Assessment Fees and Traffic Impact and Improvements Fees shall be paid by the property/owner/developer to the City of Anaheim for signalization of the project's Katella Avenue entrance.

The amount of payment will be determined by the City Council resolution in effect at the time of issuance of the building permit.

Mitigation Measure 2-5. Prior to the approval of each building permit, preparation of a new and/or revisions to existing parking and/or event management plans shall be submitted to the City Traffic and Transportation Manager for review and approval to ensure adequate parking and event management strategies (parking layouts, shuttle routes, shuttle-stop locations, etc.) are in place.

Mitigation Measure 2-6. Prior to the issuance of the first building permit, the property owner/developer shall prepare, for approval by the City Traffic and Transportation Manager, a parking plan which, if offsite parking spaces are needed to meet peak demand, will include signed shared parking agreements with offsite parking lot/structure owners. In addition, prior to each additional building permit, the property owner/developer will revise the parking plan to the satisfaction of the City Traffic and Transportation Manager.

5.2.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable impacts would occur as a result of project development with implementation of the mitigation measures.

5.3 AIR QUALITY

Air pollution potential can be defined as the tendency for high pollutant concentrations to develop at a given location. This potential is dependent upon the amount of pollutant emitted into the air and the local atmosphere's ability to transport and dilute the pollutant. Air quality impacts can be evaluated on a regional or local basis. A regional impact analysis addresses sources of mass emissions (e.g., pounds/day) of pollutants which are, or contribute to, pollutants of regional concern, such as ozone. Local impacts address the direct exposure of the pollutant of concern to the surrounding area or community. These impacts are expressed as ground-level concentrations (e.g., micrograms per cubic meter), typically at the maximally impacted receptor. The impact analysis contained in this section was prepared in accordance with the methodologies provided by the South Coast Air Quality Management District (SCAQMD) in its *1993 CEQA Air Quality Handbook*.

5.3.1 ENVIRONMENTAL CONDITIONS

Regional Setting

The proposed Anaheim Sports Center is located in the City of Anaheim in Orange County, which is in the South Coast Air Basin (Basin) of California. The Basin is a 6,600-square-mile area which encompasses all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. It is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. Its climate and topography, which are discussed below, make the Basin highly conducive to the formation of air pollution.

Climate

Regional Conditions

Meteorological conditions in the Basin, such as light winds and shallow vertical mixing, and topographical features, such as surrounding mountain ranges, hinder the dispersal of air pollutants.

Climate and air quality are determined by the location, topography, and urbanization of an area. The climate of the coastal plain that comprises the Basin is primarily governed by the strength and location of a semipermanent, subtropical high-pressure cell over the Pacific Ocean. Climate is also affected by the moderating effects of the nearby oceanic heat reservoir. Warm summers, mild winters, infrequent rainfall, moderate daytime onshore breezes, and moderate humidities characterize climatic conditions throughout most of the Basin.

Frequent temperature inversions in the Basin trap air pollutants in a limited atmospheric volume near the ground and hamper dispersion. In January, a surface inversion exists on 70 percent of the mornings. The average wind speed in the Basin is less than 5 miles per hour on 80 percent of the days during the summer smog season; this is a measure of daily air stagnation. During clear, cold early winter mornings, the greatest pollution problems are from carbon monoxide (CO) and nitrogen oxide (NO_x). High carbon monoxide concentrations are most severe during days with strong surface inversions and light winds. Carbon monoxide transport is extremely limited, and highest concentrations occur in close proximity to the source of emissions. Since carbon monoxide is produced almost entirely from automobiles, the highest concentrations are associated with areas of heavy traffic.

During summer's longer daylight hours, sunshine provides the energy needed to fuel photochemical reactions between NO_x and reactive organic compounds (ROC) which form ozone. Pollutants that react to help form ozone are often termed "ozone precursor emissions." Formation of ozone requires ample sunlight, early morning stagnation in source areas, high surface temperatures, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer.

High nitrogen dioxide (NO₂) levels usually occur during the autumn or winter on days with summer weather conditions. These conditions include low inversions, limited daytime mixing, and stagnant windflows. Although days are clear, sunlight is limited in duration and intensity. Photochemical reactions which would otherwise form ozone are incomplete.

Atmospheric particulates are made up of fine solids or liquids such as soot, dust, aerosols, fumes, and mists. A large portion of the total suspended particulate (TSP) matter in the atmosphere is finer than 10 microns (PM10). As with ozone, a substantial fraction of PM10 forms in the atmosphere as a result of chemical reactions. Peak concentrations of both ozone and PM10 occur downwind of precursor emission sources.

Local Climate

Anaheim is outside the marine microclimatic zone; therefore, spring and summer days are less subject to coastal clouds or fog. Summers are warmer than along the coast but cooler than in areas of the Basin farther inland. The annual mean temperature in the Anaheim area is 62 degrees Fahrenheit, with small daily and seasonal variations. On rare occasions, temperatures may exceed 100 degrees Fahrenheit or dip below freezing.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime on-shore sea breezes. At night, the wind generally slows and reverses direction, traveling towards the sea. One other important wind regime occurs when a high-pressure center forms over the western United States and creates Santa Ana winds from the northeast and east across Orange County to the ocean.

In summer, the Santa Ana River canyon northeast of the project site is the major ozone transport route from Orange County into Riverside and San Bernardino counties. Pollutants originating in Orange County are transported by the daytime on-shore sea breezes inland where they react to form ozone some distance from where the primary pollutants were emitted.

Wind data were collected over several years at Anaheim by the South Coast Air Quality Management District (SCAQMD) and its predecessor agencies. A wind rose which displays wind patterns at the station is shown in Exhibit 5.3-1. It shows that a high proportion of winds are from the southwest.

Regulatory Requirements

Air quality in the Basin is regulated by federal, state, and regional control authorities. The U.S. Environmental Protection Agency (EPA) is involved in local air quality planning through the federal Clean Air Act (CAA), as recently amended by the Clean Air Act Amendments of 1990 (the "1990 Amendments"). The EPA is responsible for setting and enforcing the national standards for atmospheric pollutants. The EPA enforces these national standards and also regulates emission sources that are under the exclusive authority of the federal government, such as aircraft and certain locomotives.

At the state level, the Lewis-Presley Air Quality Management Act (originally adopted in 1976 and substantially amended in 1987) and the California Clean Air Act of 1988 (the Sher Bill, AB 2595) set air quality planning and regulatory responsibilities for the Basin. The California Air Resources Board (CARB), which became part of the California Environmental Protection Agency (Cal EPA), is charged with the responsibility for ensuring implementation of the California Clean Air Act (CCAA), responding to the federal CAA, coordinating efforts to attain and maintain ambient air quality standards and conducting research into the causes of, and solutions to, air pollution problems.

At the regional level, the SCAQMD and the Southern California Association of Governments (SCAG) have responsibility for preparing and periodically revising the Air Quality Management Plan (AQMP), which contains measures to meet state and federal requirements. SCAG also serves as the regional

clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed projects to analyze their impacts on SCAG's regional plans.

Federal Regulatory Requirements

The early federal legislative response to air quality concerns consisted of the Air Pollution Control Act of 1955, the Clean Air Act of 1963, and the Air Quality Act of 1967. The goal of the CAA of 1970, as stated by Congress in the 1977 CAA Amendments, was "to protect and enhance the quality of the Nation's air resources." The 1990 Amendments are extremely broad. One of the primary goals of the 1990 Amendments was an overhaul of the planning provisions for those areas not currently meeting National Ambient Air Quality Standards (NAAQS). The major titles of the 1990 Amendments address attainment of air quality standards, mobile source emissions, air toxics, acid rain, a new federal permit program, enforcement, and protection of stratospheric ozone. The title that has the potential to affect the air quality analysis of the proposed project is Title I (attainment and maintenance provisions).

Title I of the Clean Air Act Amendments of 1990

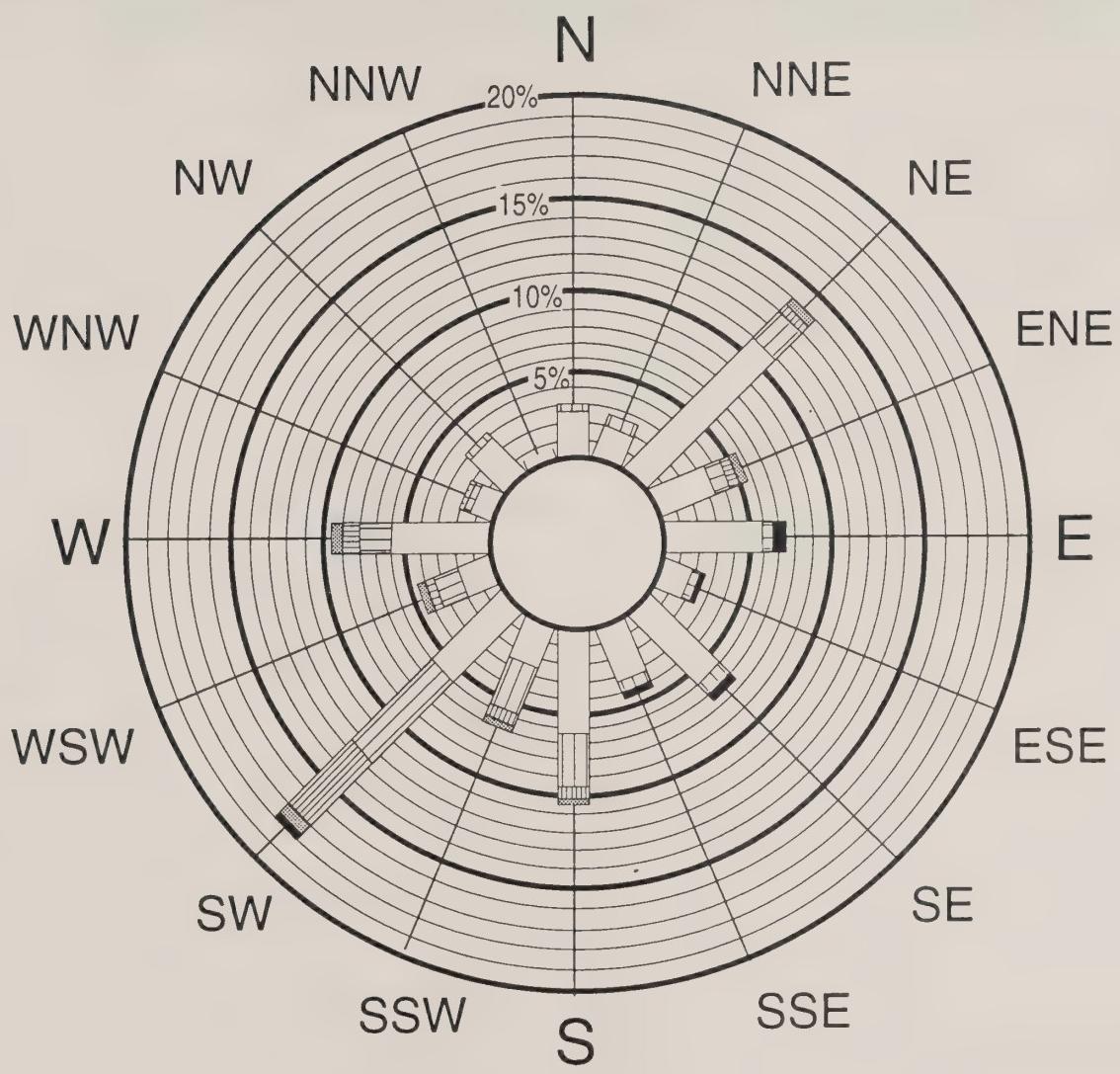
The goal of Title I is to attain federal air quality standards for six criteria pollutants: ozone (O_3), carbon monoxide (CO), fine particulate (PM10), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). Federal standards, which are established by the EPA at levels to protect public health with an adequate margin of safety, are presented in Exhibit 5.3-2, Ambient Air Quality Standards.

California Clean Air Act Requirements

The California Clean Air Act of 1988 (CCAA), amended in 1992, requires all air districts in the state to endeavor to achieve and maintain state ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide by the earliest practicable date. California's ambient air standards are generally stricter than national standards for the same pollutants. California also has established its own standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. California standards are also shown on Exhibit 5.3-2.

Regional Air Quality Plans

The SCAQMD and SCAG are responsible for formulating and implementing the AQMP for the Basin. Designated portions of the AQMP which are prepared to comply with federal and state standards are submitted to the CARB for incorporation in the State Implementation Plan (SIP) with plans and



Source: City of Anaheim, 1975.

exhibit 5.3-1
Wind Rose at Anaheim (1958-1975)

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California		National ^b	
Air Pollutant	Concentration ^a	Primary(>)	Secondary(>)
Ozone	0.09 ppm, 1-hr. avg.	0.12 ppm, 1-hr. avg.	0.12 ppm, 1-hr. avg.
Carbon Monoxide	9.0 ppm, 8-hr. avg. 20 ppm, 1-hr. avg.	9.5 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.	9.5 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.
Nitrogen Dioxide	0.25 ppm, 1-hr. avg.	0.053 ppm, annual avg.	0.053 ppm, annual avg.
Sulfur Dioxide	0.05 ppm, 24-hr. avg. ^c	0.03 ppm, annual avg. 0.14 ppm, 24-hr. avg.	0.50 ppm, 3-hr. avg.
Suspended Particulate Matter (PM 10)	30 ug/m ³ annual geometric mean 50 ug/m ³ , 24-hr. avg.	50 ug/m ³ , annual arithmetic mean 150 ug/m ³ , 24-hr. avg.	50 ug/m ³ , annual arithmetic mean 150 ug/m ³ , 24-hr. avg.
Sulfates	25 ug/m ³ , 24-hr. avg.		
Lead	1.5 ug/m ³ , 30-day avg.	1.5 ug/m ³ , calendar quarter	1.5 ug/m ³ , calendar quarter
Hydrogen Sulfide	0.03 ppm, 1-hr. avg.		
Vinyl Sulfide	0.010 ppm, 24-hr. avg.		
Visibility Reducing Particles	In sufficient amount to reduce the prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 obs.		

- a) California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour), nitrogen dioxide, suspended particulate matter-PM₁₀, visibility reducing particles, are values that are not to be exceeded. The sulfur dioxide (24-hour), sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride standards are not to be equalled or exceeded.
- b) National standards, other than ozone and those based on annual averages or annual arithmetic means, are not to exceed more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.
- c) At locations where the state standards for ozone and/or total suspended particulate matter are violated. National standards apply elsewhere.

Note: ppm = parts per million by volume.
ug/m³ = micrograms per cubic meter.

Source: California Air Resources Board, 1991.



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exhibit 5.3-2 Ambient Air Quality Standards

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regulations from other air quality management and air pollution control districts in the state. Because air quality plans are prepared to meet CCAA requirements, as well as federal CAA requirements, they may be broader than federal requirements in certain respects.

The 1994 AQMP, which contains measures intended to comply with the CAA and CCAA, was adopted by the SCAQMD Board on September 9, 1994, submitted to the CARB, and approved on November 15, 1994. The 1994 AQMP generally follows the structure of the last plan (1991) but like all new editions include many enhancements. Because the Basin does not have an approved plan that demonstrates attainment of all NAAQS by the CAA deadlines, and pursuant to a decision of the Ninth Circuit Court of Appeals (*Coalition for Clean Air v. United States EPA*, July 1, 1992), the EPA was required to prepare a Federal Implementation Program (FIP) for the Basin. The final FIP was adopted in February 1995. Implementation of the FIP, however, is prohibited by H.R. 889, the Department of Defense Emergency Supplemental Appropriations bill, signed into law by President Clinton in April 1995, that contains legislative language which will allow California to comply with the CAA by using its own SIP to attain federal air quality standards. The state's SIP is expected to be approved in late 1995.

Federal law requires only that an ozone plan be approved this year, giving the region until 1997 to submit a PM10 plan to achieve health standards for particulate. This will give SCAQMD additional time to fine-tune nitrogen oxide control measures, necessary to control PM10, that rely on advanced technology, like clean fuels. In addition, revised conformity procedures have not been adopted to date. Until the conformity procedures for the 1994 AQMP are adopted, the 1991 Conformity Procedures will be used in making an AQMP conformity determination related to the proposed project.

Existing Air Quality

Regional Conditions

Monitoring in the South Coast Air Basin

The SCAQMD is responsible for monitoring air quality in the Basin. The SCAQMD samples ambient air at 37 monitoring stations in the Basin. Locations of these stations are shown on Exhibit 5.3-3. Ambient air quality is described in terms of compliance with state and national standards. Ambient air quality standards (AAQS) are the levels of air pollutant concentration considered safe to protect the public health and welfare. They are designed to protect people most sensitive to respiratory

distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise.

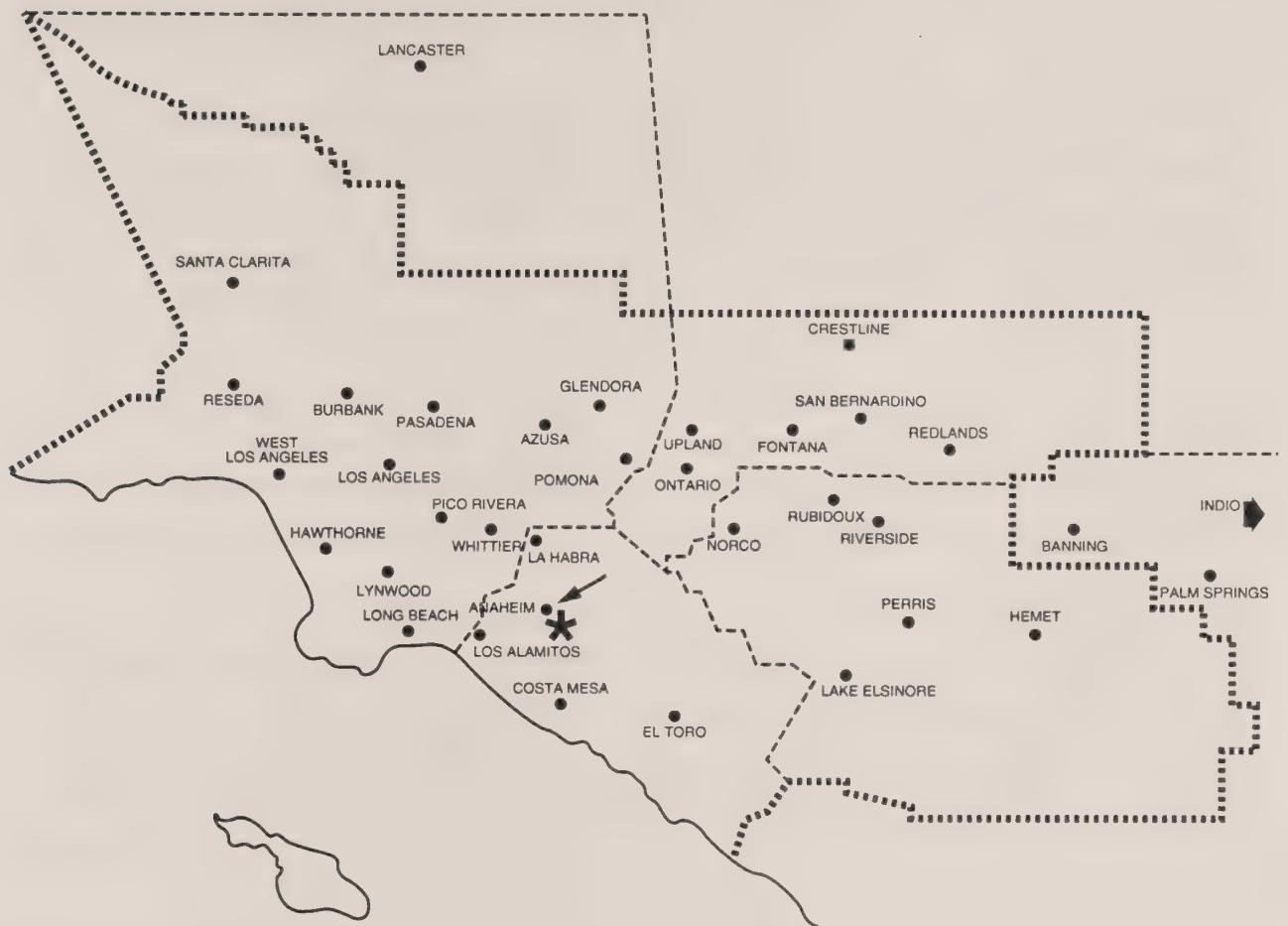
Attainment Status/Pollutant Characteristics

The CARB is required to designate areas of the state as attainment, nonattainment, or unclassified for any state standard. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A nonattainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation(s) was caused by an exceptional event, as defined in the criteria.

The Basin exceeds federal and state standards for ozone, carbon monoxide, nitrogen dioxide, and PM10. Ozone, a colorless toxic gas formed by a chemical reaction of nitrogen oxides, hydrocarbons, and sunlight, irritates the lungs and damages materials and vegetation. The organic compounds that photochemically combine with nitrogen oxides to form ozone are variously described as reactive organic compounds (ROC), reactive organic gases (ROG), reactive hydrocarbons (RHC), and volatile organic compounds (VOC). For purposes of this analysis, all of the reactive gas precursors to ozone are referred to as ROG. Because ozone formation is the result of photochemical reactions between nitrogen oxides (NO_x) and ROG, peak concentrations of ozone occur downwind of precursor emission sources. Ozone readings in areas that lie at the base of the San Gabriel and San Bernardino mountains are among the highest in the United States. The entire basin is designated as a nonattainment area for state and national ozone standards.

Carbon monoxide (CO), a colorless gas that is a major component of mobile sources emissions, interferes with the transfer of oxygen to the brain. Peak levels of carbon monoxide occur in winter throughout the basin and are highest where there is heavy traffic. The Basin is classified as a nonattainment area for the national and state carbon monoxide standards. National and state standards for carbon monoxide are exceeded in Los Angeles County but generally not in other counties. Riverside and San Bernardino counties are in attainment of the federal and state CO standards. The CARB reclassified Orange County as "attainment" for CO in 1994. However, until the SCAQMD requests a redesignation, these counties will still be included in the basinwide "severe" category for the federal CO standards.

Nitrogen dioxide (NO₂), a reddish-brown gas formed in the atmosphere by a combination of oxygen and nitric oxide, is emitted as a result of combustion. At high concentrations, NO₂ can cause breathing difficulties. Peak readings of nitrogen dioxide occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial



LEGEND

- Project Site
- Stations Representative Of Study Area's Air Quality
- South Coast Air Basin
- Air Monitoring Station

12 MI. 6 MI. 0 12 MI.
NORTH

Source: Southern California Air Quality Management District

exhibit 5.3-3
SCAQMD Air Monitoring Network

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operations) in the vicinity. The state nitrogen dioxide standard was only exceeded once in 1993, and the federal standard was not exceeded on any occasion. However, until the SCAQMD requests for redesignation, the Basin is still the only area in nonattainment of the federal nitrogen dioxide air quality standard. The entire Basin is designated as a nonattainment area for both state and national nitrogen dioxide standards.

PM10 includes only particulate matter 10 microns or less in diameter. PM10 levels regularly exceed the national standard in Los Angeles, Riverside, and San Bernardino counties. In 1990, the national PM10 standard was also exceeded in Orange County. The more stringent state PM10 standard is exceeded in all four counties. The entire Basin is designated as nonattainment for PM10 standards.

Sulfur dioxide and lead levels in all areas of the Basin are below national and state standards. The entire Basin is in attainment for these pollutants. Studies have been conducted in the Basin to examine the cancer risk due to background levels of toxic air contaminants, such as benzene, trichloromethane, chlorine, and toluene. A SCAQMD- and EPA-sponsored study showed an existing cancer risk level of 1.274 in one million (1.274×10^{-6}) in the Basin resulting from background exposure to 13 such air pollutants.

Local Air Quality

The SCAQMD maintains an air monitoring station at 1010 South Harbor Boulevard in Anaheim (the Anaheim monitoring station), approximately 4 blocks north of the northeast corner of the existing Disneyland theme park. Because the Anaheim monitoring station is close to the proposed project site, it represents baseline air quality conditions for the project area. Table 5.3-1 summarizes the last 5 years of published data from this monitoring station. Because PM10 was not monitored at the Anaheim monitoring station before, the El Toro monitoring station, which is located approximately at 23022 El Toro Road, in the City of Lake Forest, was used to describe PM10 concentrations in 1989 to 1993.

The 1-hour and 8-hour ozone levels often exceeded the state and federal standards at the Anaheim Station. CO concentrations monitored at this station exceeded the state 1-hour standard once in 1991 and did not exceed the federal 1-hour over the past 5 years. The 8-hour CO concentrations exceeded the state and federal standards in 1989, 1990, and 1992 but were below the standards in 1991 and 1993. The state NO₂ standard was exceeded once in 1989 and has not been violated since 1990. The state 24-hour PM10 standard was frequently violated at this monitoring station, but the federal PM10 standard was exceeded only a few times in 1990, and has not been violated since 1991.

TABLE 5.3-1
SUMMARY OF AIR QUALITY DATA
ANAHEIM AIR QUALITY STATION

Pollutant Standards ^a	1989	1990	1991	1992	1993
Ozone (O₃)					
State standard (1-hr. avg. >0.09 ppm)					
Federal standard (1-hr. avg. >0.12 ppm)					
Maximum concentration	0.24	0.18	0.25	0.22	0.17
Number of days state standard exceeded	42	34	41	46	23
Number of days federal standard exceeded	13	11	11	22	3
Carbon Monoxide (CO)					
State standard (1-hr. avg. >20 ppm)					
Federal standard (1-hr. avg. >35 ppm)					
State standard (8-hr. avg. ≥9.0 ppm)					
Federal standard (8-hr. avg. ≥9.0 ppm)					
Maximum concentration 1-hr. period	19	17	21	15	15
Maximum concentration 8-hr. period	12.1	11.7	8.6	9.4	7.7
Number of days state 1-hr. standard exceeded	0	0	1	0	0
Number of days federal 1-hr. standard exceeded	0	0	0	0	0
Number of days state 8-hr. standard exceeded	5	1	0	1	0
Number of days federal 8-hr. standard exceeded	5	1	0	1	0
Nitrogen Dioxide (NO₂)					
State standard (1-hr. avg. >0.25 ppm)					
Federal standard (0.0534 AAM in ppm)					
Annual arithmetic mean	0.0472	0.0469	0.0448	0.0394	0.0354
Maximum 1-hr. concentration	0.28	0.21	0.20	0.21	0.20
Number of days state 1-hr. standard exceeded	1	0	0	0	0
Suspended Particulates (PM10)					
State standard (24-hr. avg. >50 ug/m ³)					
Federal standard (24-hr. avg. >150 ug/m ³)					
Maximum 24-hr. TSP concentration	208 ^b	422	187	130	147
Maximum 24-hr. PM10 concentration	88 ^b	158	146	88	92
Percent samples exceeding state standard	33.3 ^b	33.9	23.7	19.6	21.3
Percent samples exceeding federal standard	0 ^b	1.7	0	0	0
Note: AAM = annual arithmetic mean; ug/m ³ = micrograms per cubic meter					
ppm = parts per million; NM = not monitored at this station					
^a Pollutants shown are those for which the South Coast Air Basin is designated as a federal nonattainment area.					
^b 1989 PM10 data were taken from the El Toro monitoring station.					
Source: SCAQMD Air Quality Data, 1989 through 1993.					

5.3.2 ENVIRONMENTAL IMPACTS

The potential air quality impacts of the proposed project have been analyzed using the emission factors developed by the SCAQMD and the CARB. Short-term air quality impacts from airborne dust and other emissions would result from grading, soil movement, and heavy equipment used during the construction phases of the proposed project.

In addition to short-term construction-related emissions, the project has the potential to attract new trips. Therefore, the impact analyses also includes regional and a microscale evaluation of local traffic-related air quality in the project area.

Emissions from the proposed project fall into four general categories:

- Short-term Construction Impacts: Airborne dust and emissions from heavy equipment, trucks, etc., during the construction phases of the proposed project.
- Long-term Regional Emissions Impacts: Exhaust emissions from vehicular activities associated with the proposed project.
- Long-term Local CO Hot-Spot Impacts: Traffic trips associated with the proposed project would contribute to CO concentrations along affected routes at key intersections in the project vicinity.
- Cumulative Impacts: Air quality changes resulting from the incremental impact of the proposed project when added to related projects.

Thresholds of Significance

Appendix G (Significant Effects) of the CEQA Guidelines states that a project would normally be considered to have a significant effect on air quality if the project violates any ambient air quality standard, contributes substantially to an existing air quality violation, or exposes sensitive receptors to substantial pollutant concentrations.

Criteria for determining whether the potential air quality impacts of a project would be significant were determined by the SCAQMD in its 1993 *SCAQMD CEQA Air Quality Handbook* (adopted April 1993). Although determination that a project would have a significant impact on air quality must be made by the lead agency, the SCAQMD has established recommended air pollution thresholds for project operations in total pounds per day for criteria pollutants. The threshold criteria include measurable emissions and conformity with the existing AQMP, as well as a number of other factors.

The determination that a project would have a significant impact on air quality and any subsequent finding, including a statement of overriding considerations, must be made by the lead agency.

Thresholds for Construction

The SCAQMD indicates that when estimating a project's construction-related emissions, the emissions can be averaged over a 3-month period to include only actual working days. It also establishes the following significant thresholds for air quality on a quarterly basis:

- ROG, 2.5 tons per quarter or 75 pounds on individual day
- NOx, 2.5 tons per quarter or 100 pounds on individual day
- CO, 24.75 tons per quarter or 550 pounds on individual day
- PM10, 6.75 tons per quarter or 150 pounds on individual day
- SOx, 6.75 tons per quarter or 150 pounds on individual day

Projects in the Basin with construction-related emissions that exceed any of the emission thresholds described above should be considered to be significant.

Thresholds for Operations

The SCAQMD also established thresholds from operational emissions of a proposed project. They are listed as follows:

Regional Emissions

- ROG, 55 pounds per day
- NOx, 55 pounds per day
- CO, 550 pounds per day
- PM10, 150 pounds per day
- SOx, 150 pounds per day

Local Emissions

- State 1-hour CO standard of 20 ppm, or 8-hour CO standard of 9 ppm

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below state and federal CO standards. If ambient levels are below the standards, a project is considered to have significant impacts if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal

standard, then project emissions are considered significant if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more.

Criteria for Cumulative Impacts

Cumulative impacts are considered significant unless mitigation measures reduce emissions by 18 percent by 2010 from 1992 levels or 1 percent a year for projects initiated after 1992. For the purpose of this project, the cumulative area is defined as the entire Orange County.

In addition, the following secondary effects are considered by the SCAQMD to be indicators of potentially significant impacts:

- Project interferes with attainment or maintenance of any state or federal air quality standard by either violating or contributing to an existing or projected air quality violation.
- Project results in population increases within the regional statistical area that exceed projections in the AQMP and in other than planned locations for the project's build-out year.
- Project generates vehicle trips that cause a carbon monoxide "hotspot."
- Project has the potential to create or be subject to an objectionable odor over 10 dilution to thresholds (D/T) that could impact sensitive receptors.
- Project has hazardous materials onsite and could result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.
- Project emits an air contaminant regulated by District rules or that is on the federal or state air toxic list.
- Project involves burning of hazardous, medical, or municipal waste as waste-to-energy facilities.
- Project includes sensitive receptors within a quarter mile of an existing facility that emits air toxics identified in District Rule 1401 (New Source Review of carcinogenic air contaminants) or near carbon monoxide hotspots.
- Project emits carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in 1 million.

Short-term Construction Impacts

Construction activities, including soil disturbance dust emissions and combustion pollutants from onsite construction equipment and from offsite trucks hauling dirt, asphalt, or building materials, will create a temporary addition of pollutants to the local airshed. These emissions are quite variable in time and space and differ considerably among various construction projects. Such emission levels can, therefore, only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

The preparation of the area for the proposed new facility would produce two types of air contaminants: fugitive dust generated as a result of grading or soil movement, and exhaust emissions from construction equipment and vehicles. Though these construction impacts are short-term, they could be expected during active project construction.

Heavy construction is a source of dust emissions that may have substantial temporary impact on local air quality. Construction emissions are associated with clearing, site preparation, ground excavation, grading, and the construction of the facility itself. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions.

Exhaust Emissions From Onsite Equipment

Exhaust emissions from construction activities include those associated with the transport of workers and machinery to and from the site, as well as those produced onsite as the equipment is used. Table 5.3-2 presents exhaust emissions, using emission factors published by the EPA, for various types of equipment assumed to be used during construction operations. Exhaust emissions vary substantially from day to day, depending on the level of activity. It is assumed that several pieces of mobile equipment would be used onsite, with an average of 12 hours per day, for the duration of project construction. These pieces of equipment are as follows:

- Three bulldozers
- Two loaders
- One maintenance truck
- Two dump trucks
- Two water trucks

TABLE 5.3-2
EMISSIONS FROM CONSTRUCTION EQUIPMENT
(lbs/day)

Equipment ^a	CO	ROG	NOx	SOx	PM10
2 Water trucks ^{b,c,d}	272.4	8.6	6.6	0.4	0.4
3 Off-highway trucks ^d	21.6	2.3	50.1	1.2	3.2
3 Wheeled bulldozers	--	--	--	12.6	6.0
2 Wheeled loaders ^{c,d}	249.1	8.2	8.3	0.4	0.5
Totals	543.1	19.1	65.0	14.6	10.1

^a Assumes operation of 12 hours per day and diesel fuel unless otherwise noted. Based on SCAQMD *Air Quality Handbook* Tables A9-8-A, A9-8-B, and A9-8-C.

^b Calculation based on other/miscellaneous category, Tables A9-8-A and A9-8-B, SCAQMD *CEQA Air Quality Handbook*.

^c Assumes operation 8 hours per operating day.

^d Gasoline powered.

-- Negligible generation of emissions.

Source: Michael Brandman Associates 1996.

Fugitive Dust Emissions

Earthwork and soil movement are sources of dust emissions that may have substantial impacts on local air quality. Dust emissions are associated with land clearing, ground excavation, and cut-and-fill operations. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions. A large portion of the emissions result from equipment travelling over unpaved roads at the project site. It must be noted that although construction dust contributes to the regulated pollutant PM10, the dust generated during construction activities is also composed of large particles that settle out rapidly on horizontal surfaces very near the source. These large particles (or visible dust) are easily filtered by human breathing passages and represent a nuisance, rather than a health concern.

The SCAQMD estimates that each acre of soil disturbed creates about 26.4 pounds of PM10 per workday. This value depends on soil moisture, silt content, wind speed, density of disturbance, and many other factors. The site occupies approximately 167 acres. However, the proposed project would disturb at a maximum area of approximately 30 acres at any one time. Based on the

assumption that this maximum area of the site will be under construction and disturbed during the grading period, approximately 792 pounds per day of PM10 could be generated. This level of emission is higher than the SCAQMD's construction emission threshold for PM10, which is 150 pounds of PM10 per day. Project construction is expected to result in significant short-term impacts on air quality without any mitigation with respect to generation of fugitive dust. This estimate does not assume implementation of any remediation or mitigation measures such as watering, polymer sealing, or revegetation.

Implementation of dust suppression techniques can reduce fugitive dust generation (and thus the PM10 component) by 50 to 75 percent. With implementation of mitigation, fugitive dust emissions are not expected to expose sensitive receptors to substantial PM10 levels, nor is a measurable increase in existing ambient PM10 levels expected.

Fugitive dust would be further reduced by implementation of mitigation measures designed to comply with SCAQMD Rules 402 and 403 which limit concentrations of dust and specify operational measures to avoid creating a nuisance offsite. As shown in Table 5.3-3, Total Daily Project Emissions, PM10 emissions would exceed SCAQMD-recommended thresholds; mitigation measures have been provided to minimize PM10 emissions by an additional 50 to 75 percent. With mitigation implemented, the PM10 emissions would remain higher than the SCAQMD's daily threshold for construction of 150 pounds. This would be considered an unavoidable significant short-term impact.

Long-term Regional Impacts

Operational impacts could result from direct and indirect emissions from utility usage associated with the land uses and local and regional vehicular emissions from employee, visitor, and service vehicles travelling to and from the project site. The SCAQMD significance thresholds described previously were used to assess the potential significance of operational impacts.

Utility Emissions

Utility emissions associated with the proposed project include those produced from the generation of electricity and natural gas. Based on the proposed onsite new uses and/or activities, including 750,000 square feet of retail, 550,000 square feet of hotel, and 900,000 square feet of office, the criteria emissions associated with onsite energy consumption are calculated and included in Table 5.3-4, Operational Energy-Consumption Emissions. The emission of NOx from energy consumption alone would exceed the SCAQMD's daily threshold for operation. This would be considered a significant impact.

TABLE 5.3-3
TOTAL DAILY PROJECT EMISSIONS*
(lbs/day)

Source	Pollutant				
	CO	NOx	SOx	PM10	ROG
Passive graded surface	--	--	--	792 ^b	--
Employee vehicle trips ^c	2.0	0.3	--	0.1	0.1
Equipment emissions ^d	543.1	65.0	14.6	10.1	19.1
Total emissions	545.1	65.3	14.6	802.2	19.2
SCAQMD thresholds	550	100	150	150	75
Significant impact	No	No	No	Yes	No

-- Negligible generation of emissions.
 * Equipment emissions based on factors provided by SCAQMD *CEQA Air Quality Handbook* Tables A9-8-A and A9-8-B.
^b PM10 generated at a rate of 26.4 pounds per day per acre exposed for passive graded surfaces. No mitigation was assumed.
^c Based on 1995 emission factors (45 mph) contained in Table A9-5-J-3 of the SCAQMD *CEQA Air Quality Handbook*. Based on 25, 10-mile trips (250 VMT).
^d Data taken from Table 5.3-2.

Source: Michael Brandman Associates, January 1996.

TABLE 5.3-4
OPERATIONAL ENERGY-CONSUMPTION EMISSIONS
(lbs/day)

Source	Pollutant				
	CO	NOx	SOx	PM10	ROG
Electricity	16	91	10	3	1
Natural gas	4	27	--	--	1
Subtotal	20	118	10	3	2
SCAQMD thresholds	550	55	150	150	55
Significant impact	No	Yes	No	No	No
-- Negligible generation of emissions					
Source: Michael Brandman Associates, January 1996.					

Mobile Sources

Mobile emissions associated with roadway travel and development of future land uses would result in emissions of CO, ROG, SOx, NOx, and PM10. Vehicle trips were assessed using trip generation rates provided in the traffic report prepared by Austin-Foust, Inc. (November 1995). Information on trip speed and length was based on information contained in the SCAQMD *CEQA Air Quality Handbook*. Trip length data for purposes of estimating total vehicle miles traveled (VMT) were assumed to be an average of 20 miles for visitors trips. Forty-five miles per hour was assumed as the trip speed. EMFAC7EP emission factors for the year 2009 were obtained from the SCAQMD 1993 *CEQA Air Quality Handbook*. Because emissions and ambient concentrations of CO are projected to be lower in each future year due to stricter emissions controls, use of clean fuels, and general fleet turnover to newer vehicles, this analysis for the year 2010 may slightly overstate the impact. Ambient CO concentrations for the Anaheim monitoring station were provided in Tables 5-2 and 5-3 of the CEQA Handbook for the year 2000. No ambient CO concentrations are projected for years beyond 2000.

According to the traffic report prepared by Austin-Foust, Inc., the proposed project would generate up to 41,585 trips per day under the worst-case scenario in 2010. As shown in Table 5.3-5, Operational Mobile-Source Emissions, the proposed project would have operational emissions which exceed the SCAQMD-recommended thresholds for significance for CO, NOx, and ROG. They would be considered significant impacts of the proposed project.

TABLE 5.3-5
OPERATIONAL MOBILE-SOURCE EMISSIONS
(lbs/day)

Source	Pollutant				
	CO	NOx	SOx	PM10	ROG
Anaheim Sports Center ^a	2,021	392	--	80	205
SCAQMD thresholds	550	55	150	150	55
Significant impact	Yes	Yes	No	No	Yes

^a Based on 41,585 additional ADT, 20-mile average trip length for visitors. EMFAC7EP factors (SCAQMD Table A9-5-J-10) based on worst-case speeds (SCAQMD Table A9-5-F). Total daily VMT = 890,620.

-- Negligible generation of emissions

Source: Michael Brandman Associates, January 1996.

Total Long-term Regional Emissions

The combined total of project-related long-term regional emissions is listed in Table 5.3-6, Operational Total Regional Emissions, which includes both emissions from onsite energy consumption and mobile sources traveling. Similar to the mobile sources emissions, the project-related total regional emissions would exceed the SCAQMD's daily thresholds for CO, NOx, and ROC. Therefore, the proposed project would have a significant long-term regional air quality impact.

Long-term Local Impacts

The primary mobile source pollutant of local concern is carbon monoxide. Carbon monoxide is a direct function of vehicle idling time and, thus, traffic flow conditions. Carbon monoxide transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain meteorological conditions, carbon monoxide concentrations proximate to a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, school children, the elderly, hospital patients, etc). The impact on local carbon monoxide levels was assessed with the CARB-approved CALINE4 air quality model, which allows microscale CO concentrations to be estimated along each roadway corridor or intersection. This model is designed to identify localized concentrations of carbon monoxide, often termed "hot spots."

Emission factors for Orange County area from EMFAC7EP, provided in the SCAQMD's 1993 *CEQA Air Quality Handbook* were used in CALINE4 modeling.

TABLE 5.3-6
OPERATIONAL TOTAL REGIONAL EMISSIONS
(lbs/day)

Source	Pollutant				
	CO	NOx	SOx	PM10	ROG
Energy consumption	20	118	10	3	2
Mobile sources	2,021	392	--	80	205
Total	2,041	510	10	83	207
SCAQMD thresholds	550	55	150	150	55
Significant impact	Yes	Yes	No	No	Yes

* Based on 41,585 additional ADT, 20-mile average trip length for visitors.
EMFAC7EP factors (SCAQMD Table A9-5-J-10) based on worst-case speeds
(SCAQMD Table A9-5-F). Total daily VMT = 890,620.

-- Negligible generation of emissions

Source: Michael Brandman Associates, January 1996.

A brief discussion of input to the CALINE4 model follows. The analysis was performed for the worst-case wind angle and windspeed condition and is based upon the following assumptions:

- Selected modeling locations represent the intersections closest and outside of the project site.
- Eight receptor locations within 50 meters of the roadway centerline were modeled to determine carbon monoxide dispersion concentrations.
- The calculations assume a meteorological condition of almost no wind (0.5 meter/second), a flat topographical condition between the source and receptor, and a mixing height of 700 meters.
- CO concentrations are calculated for the 1-hour averaging period and then compared to the CO 1-hour standards. CO 8-hour averages are extrapolated using techniques outlined in the California Department of Transportation Air Quality Technical Analysis Notes and compared to the CO 8-hour standards.
- Concentrations are given in parts per million (ppm) at each of the receptor locations.

- The average speed on the roadways feeding into these intersections was assumed to be 25 miles per hour. Emission factors were obtained from the CARB's EMFAC7EP Model, provided by the SCAQMD's 1993 *CEQA Air Quality Handbook*.
- Ambient (background) CO concentrations in year 2000 (no data beyond year 2000 were available) projected in Tables 5-2 and 5-3 of the SCAQMD 1993 *CEQA Air Quality Handbook* were added to the model results for year 2010 baseline and baseline with the proposed project conditions. The background concentration is 9.5 ppm for the 1-hour CO average and 5.5 ppm for the 8-hour CO average at Anaheim monitoring station.

Table 5.3-7, Carbon Monoxide Concentrations, lists the calculated year 2010 baseline and year 2010 baseline plus project CO levels at eight receptor locations at each affected intersection in the project vicinity.

It is important to note that the ambient CO concentrations (9.5 ppm) for the project area in 2010 (with 2000 data) does not exceed federal or state 1-hour CO standards (35 ppm and 20 ppm, respectively), based on data projected at the Anaheim station. The 8-hour CO concentrations (5.5 ppm) projected also would not exceed either the state or federal standard.

As indicated in Table 5.3-7, under the year 2010 baseline scenario, none of the 19 intersections modeled exceeded the state 1-hour standards for CO concentrations within 50 meters of the roadway centerlines. Under the year 2010 baseline plus project scenario, CO concentrations would remain below both state and federal 1-hour standards. No measurable increase in either 1-hour or 8-hour CO concentrations would occur at any of these 19 intersections. The changes in intersection turning movements would be so small that little change would occur for the CO concentrations at these intersections. Therefore, implementation of the proposed project would not have an adverse impact on local air quality from CO. Because no CO hotspots were identified, no nearby sensitive receptors would be affected by project-related local air quality impacts.

TABLE 5.3-7
CARBON MONOXIDE CONCENTRATIONS
(1-hour/8-hour)

Intersection	Receptor Location Plus Distance From Roadway Centerline	Baseline* (2010)	With Project* (2010)
Harbor Boulevard and Katella Avenue	NE 28	9.8/5.7	9.8/5.7
	NE 38	9.7/5.6	9.7/5.6
	SE 28	9.8/5.7	9.8/5.7
	SE 38	9.7/5.6	9.7/5.6
	SW 28	9.8/5.7	9.8/5.7
	SW 38	9.7/5.6	9.7/5.6
	NW 28	9.8/5.7	9.8/5.7
	NW 38	9.8/5.7	9.8/5.7
Haster Street and Freedman Way	NE 21	9.8/5.7	9.8/5.7
	NE 31	9.7/5.6	9.7/5.6
	SE 21	9.8/5.7	9.8/5.7
	SE 31	9.8/5.7	9.8/5.7
	SW 25	9.8/5.7	9.8/5.7
	SW 35	9.7/5.6	9.7/5.6
	NW 25	9.7/5.6	9.7/5.6
	NW 35	9.7/5.6	9.7/5.6
Haster Street and Orangewood Avenue	NE 21	9.8/5.7	9.8/5.7
	NE 31	9.7/5.6	9.7/5.6
	SE 21	9.8/5.7	9.8/5.7
	SE 31	9.7/5.6	9.7/5.6
	SW 21	9.8/5.7	9.8/5.7
	SW 31	9.7/5.6	9.7/5.6
	NW 21	9.8/5.7	9.8/5.7
	NW 31	9.8/5.7	9.8/5.7
Lewis Street and Ball Road	NE 21	9.8/5.7	9.8/5.7
	NE 31	9.8/5.7	9.8/5.7
	SE 21	9.8/5.7	9.8/5.7
	SE 31	9.8/5.7	9.8/5.7
	SW 21	9.8/5.7	9.8/5.7
	SW 31	9.8/5.7	9.8/5.7
	NW 21	9.8/5.7	9.8/5.7
	NW 31	9.8/5.7	9.8/5.7
Lewis Street and Katella Avenue	NE 21	9.8/5.7	9.8/5.7
	NE 31	9.8/5.7	9.8/5.7
	SE 21	9.8/5.7	9.8/5.7
	SE 31	9.8/5.7	9.8/5.7
	SW 21	9.8/5.7	9.8/5.7
	SW 31	9.8/5.7	9.8/5.7
	NW 21	9.8/5.7	9.8/5.7
	NW 31	9.8/5.7	9.8/5.7

TABLE 5.3-7 (continued)

Intersection	Receptor Location Plus Distance From Roadway Centerline	Baseline* (2010)	With Project* (2010)
State College Boulevard and Cerritos Avenue	NE 21 NE 31 SE 21 SE 31 SW 21 SW 31 NW 21 NW 31	9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7	9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7
State College Boulevard Gene Autry Way	NE 21 NE 31 SE 21 SE 31 SW 21 SW 31 NW 21 NW 31	9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7 9.8/5.7	9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7 9.8/5.7 9.8/5.7 9.9/5.8 9.8/5.7
State College Boulevard Orangewood Avenue	NE 28 NE 38 SE 28 SE 38 SW 28 SW 38 NW 28 NW 38	9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7 9.8/5.7 9.8/5.7 9.9/5.8 9.8/5.7	9.9/5.8 9.8/5.7 9.9/5.9 9.8/5.7 9.8/5.7 9.8/5.7 9.9/5.8 9.8/5.7
Freedman Way and Katella Avenue	NE 25 NE 35 SE 25 SE 35 SW 25 SW 35 NW 25 NW 35	9.8/5.7 9.7/5.6 9.8/5.7 9.7/5.6 9.8/5.7 9.7/5.6 9.8/5.7 9.7/5.6	9.8/5.7 9.7/5.6 9.8/5.7 9.7/5.6 9.8/5.7 9.7/5.6 9.8/5.7 9.7/5.6
Lewis Street and Orangewood Avenue	NE 18 NE 28 SE 18 SE 28 SW 15 SW 25 NW 15 NW 25	9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7	9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7 9.9/5.8 9.8/5.7

TABLE 5.3-7 (continued)

Intersection	Receptor Location Plus Distance From Roadway Centerline	Baseline ^a (2010)	With Project ^a (2010)
Anaheim Boulevard Orangewood Avenue	NE 18	9.8/5.7	9.8/5.7
	NE 28	9.8/5.7	9.8/5.7
	SE 18	9.9/5.8	9.9/5.8
	SE 28	9.8/5.7	9.8/5.7
	SW 18	9.8/5.7	9.8/5.7
	SW 28	9.8/5.7	9.8/5.7
	NW 18	9.8/5.7	9.8/5.7
	NW 28	9.7/5.6	9.7/5.6
Lewis Street and Chapman Avenue	NE 18	9.8/5.7	9.8/5.7
	NE 28	9.7/5.6	9.7/5.6
	SE 18	9.8/5.7	9.8/5.7
	SE 28	9.7/5.6	9.7/5.6
	SW 18	9.7/5.6	9.7/5.6
	SW 28	9.7/5.6	9.7/5.6
	NW 18	9.7/5.6	9.7/5.6
	NW 28	9.7/5.6	9.7/5.6
Main Street and Collins Avenue	NE 18	9.7/5.6	9.7/5.6
	NE 28	9.7/5.6	9.7/5.6
	SE 18	9.7/5.6	9.7/5.6
	SE 28	9.7/5.6	9.7/5.6
	SW 18	9.7/5.6	9.7/5.6
	SW 28	9.7/5.6	9.7/5.6
	NW 18	9.7/5.6	9.7/5.6
	NW 28	9.7/5.6	9.7/5.6
Main Street and Chapman Avenue	NE 21	9.8/5.7	9.8/5.7
	NE 31	9.8/5.7	9.8/5.7
	SE 21	9.8/5.7	9.8/5.7
	SE 31	9.8/5.7	9.8/5.7
	SW 21	9.8/5.7	9.8/5.7
	SW 31	9.7/5.6	9.7/5.6
	NW 21	9.8/5.7	9.8/5.7
	NW 31	9.8/5.7	9.8/5.7
State College Boulevard and Anaheim Boulevard	NE 21	9.9/5.8	9.9/5.8
	NE 31	9.8/5.7	9.8/5.7
	SE 21	9.9/5.8	9.9/5.8
	SE 31	9.8/5.7	9.8/5.7
	SW 21	10.0/5.9	10.0/5.9
	SW 31	9.8/5.7	9.8/5.7
	NW 21	9.9/5.8	9.9/5.8
	NW 31	9.8/5.7	9.8/5.7

TABLE 5.3-7 (continued)

Intersection	Receptor Location Plus Distance From Roadway Centerline	Baseline ^a (2010)	With Project ^a (2010)
State College Boulevard and Katella Avenue	NE 28	9.9/5.8	9.9/5.8
	NE 38	9.8/5.7	9.8/5.7
	SE 28	9.8/5.7	9.8/5.7
	SE 38	9.8/5.7	9.8/5.7
	SW 28	9.9/5.8	9.9/5.8
	SW 38	9.8/5.7	9.8/5.7
	NW 28	9.9/5.8	9.9/5.8
	NW 38	9.8/5.7	9.8/5.7
Main Street and Orangewood Avenue	NE 21	9.8/5.7	9.8/5.7
	NE 31	9.7/5.6	9.7/5.6
	SE 21	9.8/5.7	9.8/5.7
	SE 31	9.7/5.6	9.7/5.6
	SW 21	9.8/5.7	9.8/5.7
	SW 31	9.7/5.6	9.7/5.6
	NW 21	9.8/5.7	9.8/5.7
	NW 31	9.7/5.6	9.7/5.6
Main Street and Katella Avenue	NE 21	9.8/5.7	9.8/5.7
	NE 31	9.8/5.7	9.8/5.7
	SE 21	9.8/5.7	9.8/5.7
	SE 31	9.8/5.7	9.8/5.7
	SW 18	9.9/5.8	9.9/5.8
	SW 28	9.8/5.7	9.8/5.7
	NW 18	9.9/5.8	9.9/5.8
	NW 28	9.8/5.7	9.8/5.7
The City Drive and Chapman Avenue	NE 25	9.9/5.8	9.9/5.8
	NE 35	9.8/5.7	9.8/5.7
	SE 25	9.9/5.8	9.9/5.8
	SE 35	9.8/5.7	9.8/5.7
	SW 25	9.9/5.8	9.9/5.8
	SW 35	9.8/5.7	9.8/5.7
	NW 25	9.9/5.8	9.9/5.8
	NW 35	9.8/5.7	9.8/5.7

^a An ambient CO concentration of 9.5 ppm was added to the 1-hour CO levels, and an ambient CO concentration of 5.5 ppm was added to the 8-hour CO levels.

Source: Michael Brandman Associates, January 1996.

Conformity With State Implementation Plan and Consistency With AQMP

The purpose of the conformity and consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality standards. The Federal Clean Air Act (1990 Amendments) requires designated agencies in any area of the nation that does not meet the NAAQS to prepare a plan demonstrating the steps which will be taken to bring the area into compliance. The national deadline for meeting all standards was December 31, 1987. Congress in 1990 revised the CAA extending attainment deadlines to the year 2010 for areas with severely degraded air quality such as the South Coast Air Basin. Designated planning agencies in the Basin are the SCAQMD and the SCAG. The two agencies adopted a revised AQMP on July 12, 1991, which projects attainment for all national standards by the year 2010. The federal CAA also requires that projects receiving federal funds demonstrate conformity to the approved local AQMP. Conformity guidelines for the AQMP extend these requirements to all regionally significant projects, regardless of whether federal funding is being sought. Regionally significant is defined by the size of the project, either in square footage or number of units. Projects larger than the minimum size are required to demonstrate conformity with the AQMP by showing that they are within the job/housing balance ratio designated for the subregion in which they are located. If a project cannot make such a finding, it is required to include transportation control measures that achieve an equivalent reduction in vehicle trips and miles traveled.

The SCAQMD adopted the 1994 Air Quality Management Plan (1994 AQMP) on September 9, 1994. The 1994 AQMP is then the regionally approved air quality plan used to meet CEQA Guidelines determinations that a project may have significant environmental effects if it is not consistent with locally adopted environmental plans. However, guidelines for the 1994 AQMP continued requirements for project conformity to the policies and measures contained in the 1989 and 1991 AQMPs.

SCAG has developed conformity procedures for three types of projects: transportation, general development projects, and wastewater treatment facilities. The proposed project's consistency with the AQMP has been assessed using the criteria for general development projects. The SCAG *Guidelines for Implementation of Conformity Procedures* contain a list of minimum criteria (Appendix A of the General Development Handbook) for general development project review. The proposed project contains a new stadium that exceeds the "sports, entertainment, or recreation facilities that accommodate at least 4,000 people per performance, or that contain 1,500 or more fixed seats" criteria on this list and, therefore, would be considered regionally significant.

Conformity Review Procedures Related to Growth Management (SCAG Guidelines) set forth three criteria for demonstrating the conformance of general development projects with the 1991 AQMP and

the 1994 GMP. The three criteria set forth in the SCAG Guidelines require that regionally significant general development projects demonstrate that:

- The project is contributing to the attainment of the appropriate subregional jobs/housing performance ratio, or is otherwise contributing to attainment of targeted reductions in subregional VMT.
- Vehicle trips (VT) and VMT have been reduced to the greatest extent feasible by the application of transportation demand management (TDM) strategies.
- The project's impacts on regional and local (subregional) air quality have been analyzed and indicate that the project is helping to implement regional growth management objectives and reduce VT/VMT through the application of TDM strategies.

The Anaheim Sports Center, which includes entertainment, retail, offices, exhibition, and hotels serving visitors to the project area in conjunction with other City attractions, such as Disneyland, the Convention Center, and the Pond, would facilitate longer stays in the area, less regional travel, and less cold stands associated with private automobiles, as all facilities in the area, including the existing Anaheim Stadium, the Convention Center, and Disneyland, are within walking or local shuttle distance from each other. The Anaheim Sports Center, therefore, shares many of the VMT characteristics analyzed in The Disneyland Resort EIR and The Anaheim Resort EIR, which found that the project's design would result in longer stays and fewer regional vehicular trips and VMT for future visitors than are currently attributed to Convention Center and Disneyland guests. Therefore, the Anaheim Sports Center conforms to the first SCAG conformity criterion by contributing to a reduction in overall regional vehicle miles traveled.

The Anaheim Sports Center would be served by a Transportation Management Association (together with other facilities within the Anaheim Resort area) to help provide transportation information and assistance to visitors. In addition, the area may be served by a local shuttle service, and a new intermodal transportation facility is currently planned to link the area to regional transit facilities. These services, combined with implementation of and participation in the City's TDM Ordinance within the project area and provision of the transportation facilities designed to serve The Disneyland Resort visitors that were described in The Disneyland Resort EIR, ensure that the Anaheim Sports Center conforms to the second of the three SCAG conformity criteria.

The project's impacts on local and regional air quality are discussed in detail above. The SCAG Guidelines indicate that a project would not have a significant adverse impact on air quality in the long-term (5 years or longer) in the event it is helping to implement the regional growth management

policy through a reduction in VMT or improved jobs/housing balance and is helping to reduce VMT/VT through application of TDM strategies. The project satisfies both of these criteria, as discussed above. Additionally, localized modeling for potential CO "hotspots" indicates that the project would not negatively affect any local sensitive receptor or exceed applicable state or federal air quality standards. The project has also incorporated mitigation measures to reduce construction and operational emissions to the greatest extent feasible. Therefore, the proposed project would be in conformity with the approved AQMP.

5.3.3 CUMULATIVE IMPACT

Construction associated with other ongoing development in the vicinity of the project site would contribute to the cumulative PM10 concentrations. Because Orange County is in nonattainment with the state PM10 standard, this impact is considered cumulatively significant. The SCAQMD recommends implementing the construction-related measures described below to minimize the potential for adverse air quality impacts.

The traffic analysis for impacts on local intersections includes related projects identified for 2010 of projected local growth in its determination of the baseline conditions. Therefore, the analysis under local impact also addressed the cumulative local air quality impacts of related projects in 2010. As discussed previously, there would be no CO "hot spots" resulting from the proposed project and other related projects in the project vicinity.

Electrical generation emissions in the Basin have been capped. Any increase in electricity usage will be provided by electricity generated outside of the Basin or by low polluting alternatives such as wind energy. Natural gas usage will also be reduced through SCAQMD rules and through energy conservation requirements. These emission sources would not contribute to adverse cumulative impacts because of offsetting requirements; however, the increase in emissions from direct vehicle trips associated with the project, without mitigation, would contribute on a cumulative basis in 2010 to significant adverse impacts on ROC, NOx, CO, and PM10 emissions in the Basin. Because the proposed project would postpone or interfere with attainment of the state and federal air quality standards by contributing to the existing air quality violation in the Basin, the proposed project would have significant cumulative air quality impacts.

5.3.4 MITIGATION MEASURES

Mitigation Measure 3-1. Ongoing during construction, the property owner/developer shall implement measures to reduce construction-related air quality impacts. These measures shall include, but are not limited, to:

- a. Normal wetting procedures (at least twice daily) or other dust palliative measures shall be followed during earth-moving operations to minimize fugitive dust emissions, in compliance with the City of Anaheim Municipal Code including application of chemical soil stabilizers to exposed soils after grading is completed and replacing ground cover in disturbed areas as quickly as practicable.
- b. Enclosing, covering, watering twice daily, or applying approved soil binders, according to manufacturer's specification, to exposed stock piles.
- c. Roadways adjacent to the project shall be swept and cleared of any spilled export materials at least twice a day to assist in minimizing fugitive dust; and, haul routes shall be cleared as needed if spills of materials exported from the project site occur.
- d. Where practicable, heavy duty construction equipment shall be kept onsite when not in operation to minimize exhaust emissions associated with vehicles repetitiously entering and exiting the project site.
- e. Trucks importing or exporting soil material and/or debris shall be covered prior to entering public streets.
- f. Taking preventive measures to ensure that trucks do not carry dirt on tires onto public streets, including treating onsite roads and staging areas.
- g. Preventing trucks from idling for longer than 2 minutes.
- h. Manually irrigate or activate irrigation systems necessary to water and maintain the vegetation as soon as planting is completed.
- i. Reduce traffic speeds on all unpaved road surfaces to 15 miles per hour or less.
- j. Suspend all grading operations when wind speeds (as instantaneous gust) exceed 25 miles per hour and during first and second stage smog alerts.
- k. Comply with the SCAQMD Rule 402, which states that no dust impacts offsite are sufficient to be called a nuisance, and SCAQMD Rule 403, which restricts visible emissions from construction.
- l. Use low emission mobile construction equipment (e.g., tractors, scrapers, dozers, etc.) where practicable.

- m. Utilize existing power sources (e.g., power poles) or clean-fuel generators rather than temporary power generators, where practicable.
- n. Maintain construction equipment engines by keeping them properly tuned.
- o. Use low sulfur fuel for equipment, to the extent practicable.

Mitigation Measure 3-2. Prior to approval of each grading plan (for Import/Export Plan) and prior to issuance of demolition permit (for Demolition Plan), the property owner/developer shall submit Demolition and Import/Export Plans. The plans shall include identification of offsite locations for materials export from the project and options for disposal of excess material. These options may include recycling of materials onsite, sale to a soil broker or contractor, sale to a project in the vicinity or transport to an environmentally cleared landfill, with attempts made to move it within Orange County. The property owner/developer shall offer recyclable building materials, such as asphalt or concrete for sale or removal by private firms or public agencies for use in construction of other projects, if not all can be reused on project site.

Mitigation Measure 3-3. Prior to the issuance of each building permit, the property owner/developer shall submit evidence that low emission paints and coatings are utilized in the design and construction of buildings, in compliance with SCAQMD regulations. This information shall be denoted on the project plans and specifications. The property owner/developer shall also implement the following to limit emissions from architectural coatings and asphalt usage: (1) use nonsolvent-based coatings on buildings, wherever appropriate; (2) use solvent-based coatings where they are needed in ways that minimize element emissions; and (3) encourage use of high-solid or water-based coatings.

Mitigation Measure 3-4. Ongoing during project operation, the property owner/developer shall implement measures to reduce emissions to the extent practical, schedule goods movements for off-peak traffic hours, and use clean fuel for vehicles and other equipment, as practicable. The TDM programs and services documented in Section 5.2-4 shall be implemented for both employees and guests of the Anaheim Sports Center.

5.3.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Implementation of the proposed project would result in significant short-term air quality (PM10) impacts during construction. This would remain an unavoidable adverse impact.

The proposed project would result in significant regional air quality impacts by contributing emissions of carbon monoxide, nitrogen oxides, and reactive organic compounds exceeding the SCAQMD's thresholds and would contribute to the postponement of the attainment for these criteria pollutants in the Basin.

5.4 NOISE

The analysis of noise conditions and potential project impacts consists of calculating existing traffic noise levels along representative affected roadway segments in the project vicinity, prediction of future noise conditions, and comparison of expected noise with relevant standards and criteria to determine impacts.

5.4.1 ENVIRONMENTAL CONDITIONS -

Noise sources currently contributing to the environment of the proposed Anaheim Sports Center study area include motor vehicle traffic, occasional aircraft overflights, pedestrians, and natural sources such as wind. The major sources of noise within the study area come from vehicular traffic along SR-57, Katella Avenue, State College Boulevard, and Orangewood Avenue. Existing traffic noise levels in the project vicinity were documented in Table 3.5-3 in the Anaheim Resort Specific Plan EIR. Future year 2010 Average Daily Traffic (ADT) volumes used in the noise modeling along major arterials were provided by Austin-Foust Associates, Inc.

Noise Scales, Standards, and Guidelines

Noise can be measured and analyzed on many scales and frequencies. Various standards and guidelines are used to regulate noise depending on the type, endurance, and location of the noise. The scales, standards, and guidelines which apply to the analysis and regulation of noise related to this project are discussed below.

Noise Scales

Community noise levels are measured in terms of the "A-weighted decibel," abbreviated dBA. A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear. The equivalent noise level (Leq) is a single number representation of the fluctuating sound level in decibels (dB) over a specified period of time. It is an average of the fluctuating noise level. The "eq" of Leq stands for "equivalent." The Leq of a time-varying sound is equivalent or equal to a constant unchanging sound of that decibel level. Leq_(h) represents the hourly sound-energy average level. The Community Noise Equivalent Level (CNEL) is the noise and land use compatibility criteria most widely used in the State of California. This measurement represents an average of all measured noise levels obtained over 24 hours based on the dBA. Time-weighted refers to the fact that noise that occurs during certain sensitive time periods is adjusted for occurring at these times. That is, 5 decibels (5 dBA) are added to sound levels occurring in the

evening (7 p.m. to 10 p.m.), and 10 decibels (10 dBA) are added to sound levels occurring during the late evening and early morning hours (between 10 p.m. and 7 a.m.). The City of Anaheim has adopted the CNEL as its noise metric.

State and local governments have established noise standards and guidelines to protect people from potential hearing damage and various other adverse physiological and social effects associated with noise. The applicable standards and guidelines for this project are discussed below.

State of California Standards and Guidelines

The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles and motor boats, establish noise impact boundaries around airports, regulate freeway noise affecting classrooms, identify sound transmission control standards for new noise-sensitive developments, and regulate occupational noise control.

- Land Use Compatibility Guidelines. The State Office of Noise Control in "Guidelines for the Preparation and Content of Noise Elements of the General Plan," established in February 1976, provided guidance for the acceptability of projects within specific CNEL contours. Residential uses are normally unacceptable in areas exceeding 70 dB CNEL and conditionally acceptable within 60 to 70 dB CNEL. Transient lodging such as hotels and motels are conditionally acceptable up to 70 dB CNEL and normally unacceptable in areas exceeding 70 dB CNEL. Playgrounds/neighborhood parks are normally unacceptable in areas exceeding 67 dB CNEL. Business, commercial, and professional office buildings are normally acceptable in areas up to 70 dB CNEL and conditionally acceptable in areas between 70 and 77 dB CNEL. However, the state stresses that these guidelines can be modified to reflect an individual community's sensitivities to noise.

City of Anaheim Standards and Guidelines

California Government Code, Chapter 775, Section 65302(f), requires the noise element of a community's General Plan to show in quantitative terms the contours of present and projected noise levels associated with all existing and proposed major transportation elements, including highways and freeways. Noise contours for roadways within the City are provided in the 1978 Noise Element.

The City has in its noise element a maximum acceptable exterior noise exposure of 65 dBA CNEL based on the U.S. Department of Housing and Urban Development (HUD) *Aircraft Noise Impact Planning Guidelines for Local Agencies*. It also has a maximum acceptable interior noise exposure,

attributable to exterior sources, of 45 dBA CNEL in any habitable room based on the California Noise Insulation Standards.

The City has incorporated noise ordinance standards into the Noise Element of the General Plan. They are listed in Table 5.4-1, City of Anaheim Exterior Noise Limits, for various land uses. The Noise Element states that no person shall operate, or cause to be operated, any source of sound at any location within the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any other property, either incorporated or unincorporated, to exceed the noise standard for that land use, as specified in Table 5.4-1, for a cumulative period of more than 30 minutes in any hour.

Exhibit 5.4-1 shows the City of Anaheim's "Land Use Compatibility Criteria for Community Noise Element" chart. The noise levels indicated are for land use decisions related to new developments of the types of uses listed only. They are used in this EIR, however, as guidelines for analysis of noise impacts of the proposed project to existing land uses.

There are no federal or state standards limiting construction noise. Chapter 6.70 (Sound Pressure Levels) of the Anaheim Municipal Code exempts construction noise between the hours of 7:00 a.m. to 7:00 p.m. daily. Otherwise, sound pressure levels greater than 60 decibels at the property line may not be emitted for extended periods of time.

For a relatively long-term noise exposure resulting from construction activities, an exterior CNEL up to 65 dBA is generally acceptable for noise-sensitive land uses, including residences, schools, hospitals, and churches. An exterior CNEL up to 75 dBA is often considered acceptable for office buildings and other commercial activities. However, for short-term construction activities, levels considerably higher may be acceptable because of the temporary nature of the activity. An exterior CNEL up to 90 dBA for noise-sensitive land uses and up to 100 dBA for offices and commercial activities would not be considered unacceptable and is, in fact, found in the vicinity of many construction sites in downtown urban areas.

TABLE 5.4-1
CITY OF ANAHEIM EXTERIOR NOISE LIMITS

General Plan Noise Ordinance Standards		
Maximum permissible sound levels by receiving land use:		
<p>A. The noise standards for the various categories of land use identified by the Noise Control Officer as presented below shall, unless otherwise specifically indicated, apply to all such property within a designated zone.</p> <p>B. No person shall operate, or cause to be operated, any source of sound at any location within the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured on any other property either incorporated or unincorporated to exceed:</p> <ol style="list-style-type: none"> 1. The noise standard for that land use as specified below for a cumulative period of more than 30 minutes in any hour; or 2. The noise standard plus 5 dB for a cumulative period of more than 15 minutes in any hour; or 3. The noise standard plus 10 dB for a cumulative period of more than 5 minutes in any hour; or 4. The noise standard plus 15 dB for a cumulative period of more than 1 minute in any hour; or 5. The noise standard plus 20 dB or the maximum measured ambient, for any period of time. 		
Exterior Noise Limits		
Receiving Land Use Category	Time Period	Noise Level Standard (dBA)
One and Two Family, Residential	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	45 55
Multiple Dwelling, Residential, Public Space	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	50 55
Commercial	10 p.m. - 7 a.m. 7 a.m. - 10 p.m.	55 60
Industrial	Anytime	70
Source: City of Anaheim 1978.		

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L_{dn} OR CNEL, dB					
	55	60	65	70	75	80
RESIDENTIAL - LOW DENSITY SINGLE FAMILY, DUPLEX, MOBILE HOMES						
RESIDENTIAL - MULTIFAMILY						
TRANSIENT LODGING- MOTELS, HOTELS						
SCHOOLS, LIBRARIES, CHURCHES, HOSPITALS, NURSING HOMES						
AUDITORIUMS, CONCERT HALLS, AMPHITHEATRES						
SPORT ARENA, OUTDOOR SPECTATOR SPORTS						
PLAYGROUNDS, NEIGHBORHOOD PARKS						
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES						
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL						
INDUSTRIAL, MANUFACTURING UTILITIES, AGRICULTURE						

LEGEND

NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



CONDITIONALLY ACCEPTABLE

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.



NORMALLY UNACCEPTABLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE

A. NORMALIZED NOISE EXPOSURE INFORMATION DESIRED

Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L_{dn} . Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L_{dn} .

in Community Noise Exposure Areas greater than 65 dB should be discouraged and considered located within normally acceptable areas.

B. NOISE SOURCE CHARACTERISTICS

The land use-noise compatibility recommendations should be reviewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to air craft noise. In order to facilitate the purpose of the Act, one of which is to encourage land uses compatible with the 65 dB CNEL criterion wherever possible, and in order to facilitate the ability of airports to comply with the Act, residential uses located

C. SUITABLE INTERIOR ENVIRONMENTS

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L_{dn} . This requirement, couple with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

D. ACCEPTABLE OUTDOOR ENVIRONMENTS

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typical below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Source: California Department of Health, Guidelines for the Preparation and Content of Noise Elements of the General Plan, February 1976.

exhibit 5.4-1

Land Use Compatibility Criteria for Community Noise Environment

ANAHEIM SPORTS CENTER EIR



Michael Brandman Associates

19870001 • 7/95

Community Ambient Noise Degradation

In addition to the state and City criteria set forth in standards and guidelines, another consideration in defining impact criteria is based on the degradation of the existing noise environment. In long-term community noise assessments, it is "generally not significant" if no noise-sensitive sites are located in the project vicinity, or if increases in community noise level with the implementation of the project are expected to be 3 dBA or less at noise-sensitive locations and the proposed project will not result in violations of local ordinances or standards. This is a generally accepted standard by acoustical professionals. The 3 dBA increase in noise level is considered an appropriate dividing level because, based on assessment of human reaction to different noise level increases, a 3 dBA change will be perceived by most people, while changes smaller than that are generally not perceived.

If the increase in noise exposure level is greater than 3 dBA, the significance of impact will depend on the ambient noise level and the presence of noise-sensitive sites. Noise impacts are "possibly significant" if increases in noise exposure levels are expected to be greater than 5 dBA with implementation of the project. Noise impacts are "generally significant" if the proposed project will cause noise standards or ordinances to be exceeded, or increases in the community noise levels by 6 dBA or more in built-up areas, or increases by 10 dBA or more in rural areas.

For long-term, steady-state noise monitoring and regulation for such things as vehicular noise or airport noise, CNEL is used. For short-term noise regulation for such things as construction noise, the maximum permissible exterior noise standard is used.

Existing Noise Setting

The project area, which is located in the southerly portion of the City of Anaheim in central Orange County, encompasses the existing 159-acre Anaheim Stadium site and 8 acres of commercial/office professional uses at the southeast corner of State College Boulevard and Katella Avenue. The project site is generally located west of the Santa Ana River and SR-57 (Orange Freeway), south of Katella Avenue, east of State College Boulevard, and north of Orangewood Avenue. Existing land uses within and surrounding the project area include Anaheim Stadium, The Arrowhead Pond of Anaheim, an Amtrak station, and a mix of light industrial, office, retail, and service establishments.

The acoustical environment within the study area is currently affected by traffic noise from Katella Avenue, State College Boulevard, Orangewood Avenue, Gene Autry Way, Douglass Road, SR-57, and I-5. Other noise sources audible in surrounding areas include overflying aircraft, and seasonal fireworks from within the existing Disneyland theme park.

Sensitive noise receptors by state guidelines in the project vicinity include hotels and motels along major arterials in the area, as well as Recreational Vehicle (RV) or mobile home parks.

Existing Traffic Noise

Existing traffic noise levels in the project vicinity were calculated with the Federal Highway Administration's (FHWA) Highway Noise Prediction Model, FHWA-RD-77-108 (1978). Model input data included average daily traffic levels (provided by Austin-Foust Associates, Inc. in March 1994); day/night percentages of autos, medium trucks, and heavy trucks; vehicle speeds; ground attenuation factors; and roadway widths. These data were included in the 1994 Anaheim Resort Specific Plan EIR (Table 3.5-3).

No specific measurement was done to calibrate the vehicular traffic noise; however, the calculated results are considered representative based on the following: this is the only model approved by the FHWA for use in predicting the noise associated with roadway traffic, and past experiences prove that model prediction is in agreement with field measurement results.

The City of Anaheim has an exterior noise limit of 65 dB CNEL for residential uses from long-term, steady noise sources. For commercial uses, 70 dB CNEL is the exterior noise limit. These exterior noise limits are already exceeded by ambient noise conditions for the applicable land uses along Katella Avenue, State College Boulevard, Orangewood Avenue, and Douglass Road.

5.4.2 ENVIRONMENTAL IMPACTS

The potential noise impacts of the proposed project can be divided into short-term construction period and long-term effects. Construction period impacts from noise generated by grading and construction equipment are considered short-term effects. Long-term impacts are associated with future traffic-related noise impacts to the project area along affected roadways. Both are discussed in the following pages.

Thresholds of Significance

The City of Anaheim has established exterior noise guidelines for various land uses in its Noise Element of the General Plan. For residential uses they are 55 dBA L_{50} for both one- and two-family and multiple-dwelling residential during the day (7 a.m. to 10 p.m.), and 55 dBA L_{50} (one- and two-family residential) and 50 dBA L_{50} (multiple-dwelling residential) during the night (10 p.m. to 7 a.m.).

For commercial uses it is 60 dBA L₅₀ during the day and 55 dBA during the night. For industrial uses it is 70 dBA L₅₀ both during the day and night (see Table 5.4-1).

Supplementary Document G (Significant Effects) of the CEQA Guidelines states that a project would normally have a significant effect on the environment if it increases substantially the ambient noise levels for adjoining areas. Noise impacts can be considered "generally significant" if the proposed project will cause noise standards or ordinances to be exceeded, or if increases in noise exposure levels are expected to be 3 dBA or more in areas already exposed to noise levels exceeding the local noise standards. In areas where the local noise standards are not exceeded, and even after adding the project-related noise to the ambient noise level will not be exceeded, noise impacts can be considered "generally significant" only if increases in the community noise levels would be 6 dBA or more in built-up areas, or 10 dBA or more in rural areas.

Short-term Construction Impacts

Construction noise will affect ambient noise levels on and around the construction site in the vicinity of the project site. Noise generated by construction equipment, including earth-movers, material handlers, and portable generators, can reach high levels. The EPA has found that the noisiest equipment types operating at construction sites typically range from 88 dBA to 91 dBA at 50 feet. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings. Although noise ranges were found to be similar for all construction phases, the erection phase tends to be less noisy. Noise levels vary from 79 dBA to 88 dBA at 50 feet during the erection phase of construction.

Since noise from localized sources (such as construction activities) typically diminishes by about 6 dBA with each doubling of distance from source to receptor, outdoor receptors within 100 feet of construction sites that have an uninterrupted view of the construction site will experience noise greater than 85 dBA when noise on the adjacent part of the construction site exceeds 91 dBA. Construction activities will cause annoyance to land uses in the surrounding area for periods when construction equipment is operating near the edge of the property. However, being that none of these uses are considered noise-sensitive receptors, construction activities in the individual project area are not expected to significantly affect these uses. Maximum outdoor noise levels at sensitive noise receptors (mobilehome parks, etc.) between 1,000 and 1,500 feet from the construction site could be as high as 65 dBA. This would not be an unavoidable short-term adverse impact and would not be considered a significant noise impact.

Long-term Traffic Noise

Implementation of the proposed project may result in an increase in noise levels along most existing arterials in the vicinity of the project site. By the year 2010, however, noise levels along most existing arterials within the study area are expected to decrease as a result of completion of the high-occupancy vehicle (HOV) lanes on I-5.

Two future scenarios were calculated: Year 2010 Baseline and Year 2010 Baseline-Plus-Anaheim Sports Center. The year 2010 baseline traffic noise levels in the project vicinity were calculated with the FHWA Highway Noise Prediction Model, FHWA-RD-77-108 (1978). Model input data included average daily traffic levels (provided by Austin-Foust Associates, Inc., November 1995); day/night percentages of autos, medium trucks, and heavy trucks; vehicle speeds; ground attenuation factors; and roadway widths. Tables 5.4-2, Year 2010 Baseline Roadway Noise Levels, and Table 5.4-3, Year 2010 With Project Roadway Noise Levels, give distances from area roadway centerlines to 70, 65, and 60 dB CNEL and gives the CNEL at 50 feet from the nearest travel lane.

No specific measurement was done to calibrate the vehicular traffic noise; however, the calculated results are considered representative based on the following: this is the only model approved by the Federal Highway Administration for use in predicting the noise associated with roadway traffic, and past experiences prove that model prediction is in agreement with field measurement results.

Traffic noise levels in the project vicinity under the year 2010 baseline conditions would generally be from moderate to high. Along most roadway segments analyzed, the 65 dBA CNEL noise contour would extend beyond the roadway right-of-way limits. Traffic noise levels 50 feet from the centerline of near travel lane range from 53.2 dBA CNEL (Gene Autry Way east of State College Boulevard) to 70.0 dBA CNEL (Orangewood Avenue east of Anaheim Boulevard).

Traffic noise level changes in year 2010 with the implementation of the Anaheim Sports Center would be less than 1 dBA when compared to their corresponding baseline levels. These noise level changes from project-related traffic over year 2010 baseline noise levels, therefore, would not be considered significant.

TABLE 5.4-2
YEAR 2010 BASELINE ROADWAY NOISE LEVELS

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet) ^a			CNEL 50 ft. From Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
Harbor Boulevard n/o Katella Ave. s/o Katella Ave.	< 50 ^b 62	104 121	218 255	67.0 68.0
Anaheim Boulevard n/o Orangewood Ave. s/o Orangewood Ave. w/o State College Blvd. e/o State College Blvd.	< 50 < 50 < 50 < 50	58 < 50 < 50 95	122 69 53 204	64.5 60.7 58.9 67.9
Lewis Street n/o Ball Rd. s/o Ball Rd. n/o Katella Ave. s/o Katella Ave. s/o Orangewood Ave. n/o Chapman Ave. s/o Chapman Ave.	< 50 < 50 < 50 < 50 < 50 < 50 < 50	< 50 63 64 < 50 71 68 71	< 50 131 132 107 150 145 152	55.3 64.4 64.5 63.1 65.9 65.7 65.9
State College Boulevard n/o Cerritos Ave. s/o Cerritos Ave. n/o Gene Autry s/o Gene Autry n/o Orangewood Ave. s/o Orangewood Ave. n/o Anaheim Blvd. s/o Anaheim Blvd.	55 57 64 62 72 59 61 68	114 117 133 130 145 113 118 134	243 250 283 277 306 236 248 283	68.5 68.7 69.5 69.4 69.2 67.5 67.8 68.7
Main Street n/o Collins Ave. s/o Collins Ave. n/o Chapman Ave. s/o Chapman Ave.	< 50 < 50 < 50 < 50	84 86 96 108	178 184 203 230	67.0 67.2 67.3 68.1
Haster Street n/o Freedman Way s/o Freedman Way n/o Orangewood Ave. s/o Orangewood Ave.	< 50 < 50 < 50 54	107 97 93 112	227 205 194 239	67.6 67.4 66.6 68.4
Freedman Way n/o Katella Ave. s/o Katella Ave. w/o Haster St. e/o Haster St.	< 50 < 50 < 50 < 50	84 68 82 86	175 144 167 183	65.9 65.6 65.2 66.6

TABLE 5.4-2 (continued)

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet) ^a			CNEL 50 ft. From Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
Ball Road w/o Lewis St. e/o Lewis St.	62 60	126 120	267 254	68.7 68.4
Cerritos Avenue w/o State College Blvd. e/o State College Blvd.	< 50 < 50	58 < 50	123 107	64.6 63.6
Katella Avenue w/o Harbor Blvd. e/o Harbor Blvd. w/o Freedman Way e/o Freedman Way w/o Lewis St. e/o Lewis St.	< 50 < 50 56 < 50 67 61	106 91 116 97 132 124	221 187 248 204 279 263	67.1 66.0 68.7 66.9 68.6 68.6
Gene Autry w/o State College Blvd. e/o State College Blvd.	< 50 < 50	59 < 50	124 < 50	64.6 53.2
Collins Avenue w/o Main St. e/o Main St.	< 50 < 50	< 50 59	102 124	63.3 64.6
Chapman Avenue w/o Lewis St. e/o Lewis St. w/o Main St. e/o Main St.	< 50 < 50 < 50 < 50	100 94 98 87	210 197 209 183	67.1 66.7 67.5 66.7
Orangewood Avenue w/o Haster St. e/o Haster St. w/o Lewis St. e/o Lewis St. w/o Anaheim Blvd. e/o Anaheim Blvd. w/o State College Blvd. e/o State College Blvd.	< 50 < 50 < 50 57 64 62 59 < 50	77 91 88 118 131 131 118 82	163 192 188 251 278 281 250 171	65.9 67.0 67.3 68.7 69.0 70.0 68.3 65.8
State College Boulevard n/o Katella Ave. s/o Katella Ave.	60 70	116 140	244 295	67.7 69.0
Katella Avenue w/o State College Blvd. e/o State College Blvd. w/o Main St. e/o Main St.	58 65 55 61	112 128 112 126	234 269 239 269	67.4 68.4 68.4 69.2

TABLE 5.4-2 (continued)

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet) ^a			CNEL 50 ft. From Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
Main Street n/o Katella Ave.	<50	78	164	65.9
s/o Katella Ave.	<50	91	194	67.0
n/o Orangewood Ave.	<50	91	193	67.0
s/o Orangewood Ave.	<50	96	204	67.4
Orangewood Avenue w/o Main St.	<50	76	162	66.4
e/o Main St.	<50	76	162	66.4
The City Drive n/o Chapman Ave.	64	130	275	68.9
s/o Chapman Ave.	62	125	266	68.7
Chapman Avenue w/o The City Drive	55	113	242	68.5
e/o The City Drive	56	117	249	68.7

^a Does not consider any obstructions to the noise path.
^b Noise levels within 50 feet of roadway centerline require site-specific study.

Source: Michael Brandman Associates, January 1996.

TABLE 5.4-3
YEAR 2010 WITH-PROJECT ROADWAY NOISE LEVELS

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet)*			CNEL 50 Ft. From Centerline of Near Travel Lane of Roadway	Increase Over Baseline Levels, dBA
	70 CNEL	65 CNEL	60 CNEL		
Harbor Boulevard n/o Katella Ave. s/o Katella Ave.	< 50 ^b 62	104 121	218 255	67.0 68.0	0.0 0.0
Anaheim Boulevard n/o Orangewood Ave. s/o Orangewood Ave. w/o State College Blvd. e/o State College Blvd.	< 50 < 50 < 50 < 50	57 < 50 < 50 95	122 69 53 204	64.5 60.7 58.9 67.9	0.0 0.0 0.0 0.0
Lewis Street n/o Ball Rd. s/o Ball Rd. n/o Katella Ave. s/o Katella Ave. s/o Orangewood Ave. n/o Chapman Ave. s/o Chapman Ave.	< 50 < 50 < 50 < 50 < 50 < 50 < 50	< 50 63 64 < 50 71 68 71	< 50 131 132 107 151 145 152	55.3 64.4 64.5 63.1 65.9 65.7 65.9	0.0 0.0 0.0 0.0 0.0 0.0 0.0
State College Boulevard n/o Cerritos Ave. s/o Cerritos Ave. n/o Gene Autry s/o Gene Autry n/o Orangewood Ave. s/o Orangewood Ave. n/o Anaheim Blvd. s/o Anaheim Blvd.	55 57 66 63 74 59 61 68	115 118 138 132 149 114 119 135	245 252 296 281 315 238 250 285	68.6 68.8 69.8 69.5 69.4 67.6 67.9 68.7	0.1 0.1 0.3 0.1 0.2 0.1 0.1 0.0
Main Street n/o Collins Ave. s/o Collins Ave. n/o Chapman Ave. s/o Chapman Ave.	< 50 < 50 < 50 < 50	84 86 96 108	178 184 204 230	67.0 67.2 67.4 68.2	0.0 0.0 0.1 0.1
Haster Street n/o Freedman Way s/o Freedman Way n/o Orangewood Ave. s/o Orangewood Ave.	< 50 < 50 < 50 55	107 97 93 112	227 205 194 239	67.6 67.4 66.6 68.4	0.0 0.0 0.0 0.0
Freedman Way n/o Katella Ave. s/o Katella Ave. w/o Haster St. e/o Haster St.	< 50 < 50 < 50 < 50	84 68 82 86	175 144 167 182	65.9 65.6 65.2 66.6	0.0 0.0 0.0 0.0

TABLE 5.4-3 (continued)

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet)*			CNEL 50 Ft. From Centerline of Near Travel Lane of Roadway	Increase Over Baseline Levels, dBA
	70 CNEL	65 CNEL	60 CNEL		
Ball Road w/o Lewis St. e/o Lewis St.	62 60	126 120	268 255	68.7 68.4	0.0 0.0
Cerritos Avenue w/o State College Blvd. e/o State College Blvd.	< 50 < 50	58 < 50	123 107	64.6 63.6	0.0 0.0
Katella Avenue w/o Harbor Blvd. e/o Harbor Blvd. w/o Freedman Way e/o Freedman Way w/o Lewis St. e/o Lewis St.	< 50 < 50 56 < 50 67 61	106 90 116 97 132 123	220 186 247 203 278 261	67.0 65.9 68.6 66.9 68.6 68.5	-0.1 -0.1 -0.1 0.0 0.0 -0.1
Gene Autry Way w/o State College Blvd. e/o State College Blvd.	< 50 < 50	67 < 50	142 < 50	65.5 63.2	0.9 1.0
Collins Avenue w/o Main St. e/o Main St.	< 50 < 50	< 50 59	102 124	63.3 64.6	0.0 0.0
Chapman Avenue w/o Lewis St. e/o Lewis St. w/o Main St. e/o Main St.	< 50 < 50 < 50 < 50	100 94 98 87	210 197 209 183	67.1 66.7 67.5 66.7	0.0 0.0 0.0 0.0
Orangewood Avenue w/o Haster St. e/o Haster St. w/o Lewis St. e/o Lewis St. w/o Anaheim Blvd. e/o Anaheim Blvd. w/o State College Blvd. e/o State College Blvd.	< 50 < 50 < 50 57 65 62 60 < 50	78 91 89 119 133 133 120 82	163 194 190 253 282 284 254 171	65.9 67.0 67.4 68.8 69.1 70.1 68.4 65.8	0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.0
State College Blvd. n/o Katella Ave. s/o Katella Ave.	60 70	117 139	245 295	67.7 69.0	0.0 0.0
Katella Avenue w/o State College Blvd. e/o State College Blvd. w/o Main St. e/o Main St.	< 50 65 55 61	111 127 112 126	232 267 239 269	67.4 68.3 68.4 69.2	0.0 -0.1 0.0 0.0

TABLE 5.4-3 (continued)

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet) ^a			CNEL 50 Ft. From Centerline of Near Travel Lane of Roadway	Increase Over Baseline Levels, dBA
	70 CNEL	65 CNEL	60 CNEL		
Main Street					
n/o Katella Ave.	<50	78	164	65.9	0.0
s/o Katella Ave.	<50	92	194	67.1	0.1
n/o Orangewood Ave.	<50	91	193	67.0	0.0
s/o Orangewood Ave.	<50	96	204	67.4	0.0
Orangewood Avenue					
w/o Main St.	<50	76	162	66.4	0.0
e/o Main St.	<50	76	161	66.3	-0.1
The City Drive					
n/o Chapman Ave.	64	130	277	68.9	0.0
s/o Chapman Ave.	62	126	267	68.7	0.0
Chapman Avenue					
w/o The City Dr.	55	114	242	68.5	0.0
e/o The City Dr.	56	117	249	68.7	0.0

^a Does not consider any obstructions to the noise path.
^b Noise levels within 50 feet of roadway centerline require site-specific study.

Source: Michael Brandman Associates, January 1996.

Traffic noise levels in 2010 will decrease from their corresponding existing levels because of traffic redistribution and road improvements anticipated in the future along the following segments:

- Katella Avenue east and west of Harbor Boulevard, east and west of Freedman Way
- Katella Avenue at Lewis Street to State College Boulevard
- Katella Avenue east of State College Boulevard
- Orangewood Avenue east of Main Street

Traffic noise level increases in 2010 due to implementation of the Anaheim Sports Center would be less than 1 dBA or less from their baseline levels along the following roadway segments:

- State College Boulevard from north of Cerritos Avenue to north of Anaheim Boulevard
- Main Street on both sides of Chapman Avenue
- Main Street south of Katella Avenue

- Gene Autry Way on both sides of State College Boulevard
- Orangewood Avenue from west of Lewis Street to west of State College Boulevard

These noise-level changes attributable to traffic from implementation of the project will not be considered significant.

5.4.3 CUMULATIVE IMPACTS

The noise impacts associated with vehicular traffic described in Section 5.4.2 are considered to be cumulative in nature. As mentioned in Section 5.2 (Transportation and Circulation), the traffic analysis looked at baseline data consisting of anticipated regional growth and related projects in the project area. Therefore, traffic noise levels with the project are representative of cumulative 2000 and 2010 scenarios. Traffic noise changes along affected roadway segments in the project vicinity would be less than 1 dBA when compared to their baseline levels. The proposed project would not contribute significantly to the cumulative traffic noise levels. This impact is considered less than significant.

5.4.4 MITIGATION MEASURES

The following measures shall be implemented for the proposed project by an applicant to minimize impacts of project noise in the vicinity of the project site to the satisfaction of the Chief Building Official:

Mitigation Measure 4-1. During demolition, grading, and construction, noise generated by construction activity shall be limited by the property owner/developer to 60 dBA along the property boundaries, before 7 a.m. and after 7 p.m., as governed by Chapter 6.7, Sound Pressure Level, of the Anaheim Municipal Code.

Mitigation Measure 4-2. During construction, the property owner/developer shall ensure that all internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers.

Mitigation Measure 4-3. Prior to issuance of building permits for the new stadium, building plans for the facility shall be reviewed by a certified acoustical engineer to ensure that noise from the facility does not exceed the noise levels established by the City of Anaheim Sound Pressure Level Ordinance. Compliance with said ordinance shall be to the satisfaction of the Chief Building Official.

5.4.4 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Noise from vehicular traffic will incrementally increase roadway noise; this impact will not be perceptible in most locations and is not a significant project-related impact. No significant noise impacts or exceedances of the City's Noise Ordinance are anticipated from future development projects.

5.5 EARTH RESOURCES

Various geotechnical investigations have been conducted on or immediately adjacent to the project site. Following is a listing of the investigations that have been conducted.

- In May 1964, the Foundation Investigation Report was prepared for Anaheim Stadium by Converse Foundation Engineers.
- In April 1979, the Soil and Foundation Investigation Report was prepared for the Anaheim Stadium Addition by Converse Ward Davis Dixon, Inc.
- In May 1991, the Report - Geotechnical Investigation, Anaheim Stadium Warehouse/Office Building, 2000 South State College, was prepared by Smith-Emery Company.
- In March 1992, the Report of Foundation Investigation, Office and Support Facilities Annex, Anaheim Stadium, was prepared by STE Associates, Inc.

The following analysis summarizes information obtained from the above-mentioned geotechnical reports and also from the draft EIRs on the Anaheim Stadium Business Center and Anaheim Resort Specific Plan prepared in June 1986 and June 1994, respectively.

5.5.1 ENVIRONMENTAL CONDITIONS

Geology and Soils

The project site is located within the Peninsular Range Province which extends from Los Angeles County to southern Baja California, Mexico. The project site is located near the southeasterly margin of the Central Block, a portion of the Los Angeles Basin. The ground surface of the Central Block is represented by broad, low relief, essentially flat plain. The Central Block is a very large elongate structural trough filled with many thousands of feet of Quaternary and Tertiary sediments. The Newport-Inglewood Fault trends northwest-southeast, approximately 9 miles south of the site. This fault zone represents the western edge of the Central Block and is characterized by several low, well-rounded hills along the fault trace. The northern margin of the Central Block is represented by the Whittier Fault, approximately 9 miles north of the site at the base of the Puente Hills.

Geologically, the project site is situated on a relatively flat surface with a shallow 16-foot-per-mile slope (250:1) to the southwest. This surface was formed by stream deposition meandering back and forth, creating a broad alluvial plain. The alluvial deposits were derived predominately from the Santa Ana River.

A 2,000-foot-thick section of alluvium (unconsolidated sediment) underlies the project site. These materials consist of predominately horizontally bedded sands and silts. Based on borings in 1979, the alluvium has not been deformed or displaced significantly by folding or faulting to depths of at least 30 feet below the existing ground surface.

Sedimentary formations underlying the site consist of consolidated and semiconsolidated sandstone, siltstone, and conglomerates of Cretaceous to late Tertiary age. The more significant formations underlying the site are from youngest to oldest: Fernando, Puente, El Modeno Volcanics, Topanga, Vaqueros, and Sespe formations.

Soils underlying the project site include the Hueneme and Metz series (U.S. Department of Agriculture, Soil Conservation Service and Forest Service, 1978). The Hueneme series is characterized by moderately rapid permeability, slow runoff, and a slight erosion potential. The Metz series is characterized by moderate permeability, slow runoff, and a slight erosion potential.

Based on boring samples obtained during the geotechnical investigation conducted in 1964 for the development of Anaheim Stadium, the upper 12 to 20 feet of soil consists of medium-dense, fine and fine-to-medium sand with occasional traces of gravel and infrequent seams of silt. Below the upper layer of sand, the soil is more silty; and alternate layers of silt, sandy silt, silty sand, and sand were found to be predominant soil types in the next 25 to 45 feet. Below 45 feet, fine-to-coarse sand with up to 50 percent gravel and rock was encountered in most of the borings. No groundwater was observed to the maximum boring depth of 80 feet. Based on a geologic investigation conducted in April 1979, review of groundwater wells in the vicinity of the project site indicated that groundwater levels were approximately 130 feet below the existing onsite ground surface.

Geologic Faulting and Seismicity

Earthquakes are common to Southern California. Geologic evidence is used to determine the likelihood of future rupture along a fault. Faults are described as active, potentially active, or inactive, based on their potential for activity. Those faults that give evidence of surface displacement within Holocene time (the last 11,000 years) have the highest potential of generating earthquakes again and are described as active. Distinct landforms suggesting fault movement within the last 11,000 years include sag ponds, offset drainages, linear valleys, and springs. Special study zones have been established along known active faults in California in accordance with the Alquist-Priolo Special Studies Zones Act in 1972.

Faults that are poorly defined or inadequately studied but that have shown activity within the last 1.6 million years are considered potentially active. As such, their recurrence rates may be tens of thousands of years long but still capable of producing moderate-to-large earthquakes within the design life of many critical or long-lifetime structures.

Aerial photographic interpretations and a geologic reconnaissance of the site were conducted for a geologic investigation in 1979, and no evidence that would suggest recent faulting was observed on or adjacent to the project site. There was relatively good correlation of the stratified alluvium among the borings that were taken in 1979. Furthermore, topographic maps were reviewed for possible physiographic evidence suggesting faulting. No recent faulting through or near the site was observed on the topographic maps.

The nearest active faults to the project site are the Newport-Inglewood Fault located approximately 9 miles southwest of the site and the Whittier Fault, located approximately 8 miles northeast of the site. The nearest potentially active fault is the El Modeno Fault, which is located approximately 5 miles west of the site.

Historic earthquakes that have caused substantial groundshaking in the project area include the 1933 Long Beach earthquake (magnitude 6.3) along the Newport-Inglewood Fault Zone (NIFZ), the 1987 Whittier Narrow earthquake (magnitude 5.9) on the Elysian Park Thrust Fault, the 1992 Yucca Valley (magnitude 7.4), and the 1857 Fort Tejon earthquake (magnitude 7.9) on the San Andreas Fault. In addition, the 1994 Northridge earthquake (magnitude 6.6) caused substantial groundshaking in the project area and resulted in the buckling of the outfield upperdeck and collapse of the Big "A" at Anaheim Stadium. A large earthquake in 1812 also occurred on either the southern portion of the Newport-Inglewood Fault Zone or on the San Andreas Fault near San Bernardino.

Earthquakes from several active and potentially active faults in the region could affect future developments within the project area (see Exhibit 5.5-1). The active and potentially active faults which are capable of generating strong ground motion at the site include the Newport-Inglewood, Whittier, and Elsinore faults. Other faults that may be capable of generating strong ground motion at the site include faults located offshore (i.e., Palos Verdes Fault Zone), more distant onshore faults (i.e., San Jacinto and San Andreas faults), and local faults (i.e., Norwalk, El Modeno, and Peralta Hills faults).

5.5.2 ENVIRONMENTAL IMPACTS

Thresholds of Significance

In assessing whether ultimate development of the proposed project would result in significant impacts related to earth resources, a significant impact would occur if the project would:

- Expose people or structures to major seismic hazards beyond an acceptable level.
- Permit development in areas of unsuitable and unmitigable geologic conditions.
- Create substantial soil erosion.

Geology and Soils

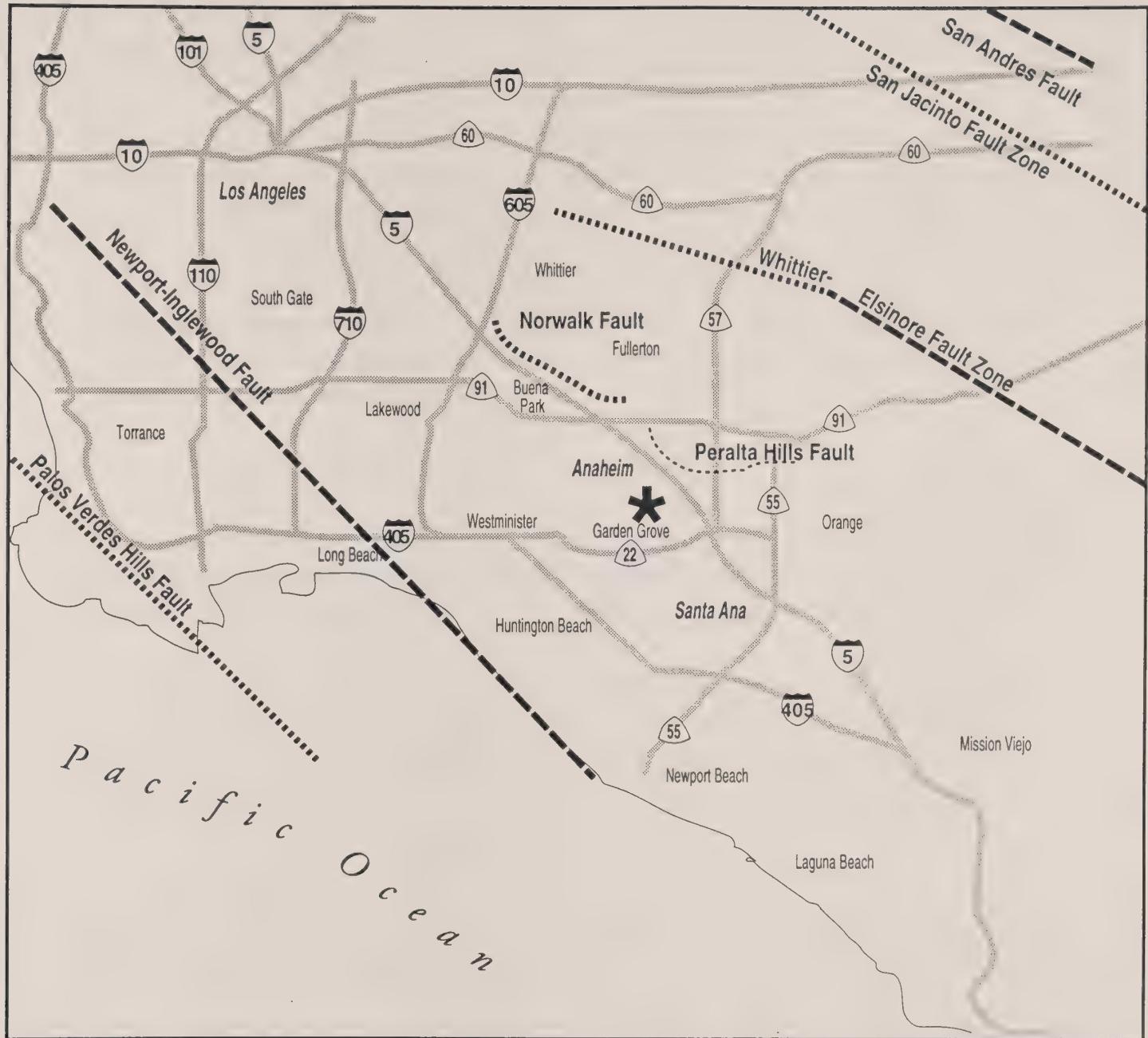
Development of the proposed project will be located on relatively flat terrain that has no major geologic constraints. The project site does not contain geologic conditions that would result in unstable conditions.

The near-surface soils are generally medium-dense, fine, and fine-to-medium sand with occasional traces of gravel and infrequent seams of silt. These soils which include the Hueneme and Metz series are considered to have a slight erosion potential. Since the project area is relatively flat and the soils are considered to have a slight erosion potential, there is little potential for erosion. As discussed in Section 5.6, Hydrology and Water Quality, the project applicant will be required to comply with the National Pollutant Discharge and Elimination (NPDES) regulation. Compliance with this regulation would require the implementation of erosion control measures during construction activities.

Geologic Faulting and Seismicity

As with other developments in Southern California, the proposed project will be exposed to impacts from earthquakes. The proposed project would not experience ground rupture impacts because there are no known faults found on or through the project site.

The project site could experience groundshaking during earthquakes. The maximum peak ground acceleration would be 0.4g, which would be experienced by a maximum credible magnitude earthquake of 7.5 on the Richter Scale along the Whittier-Elsinore Fault. This maximum peak ground acceleration is similar to the acceleration that could be experienced throughout much of Southern California. Therefore, while there is the potential for damage from groundshaking, it is not unusually severe compared to general conditions in Southern California.



LEGEND

- Project Site Location
- Alquist Priolo Special Studies Zone
- Active
- Potentially Active



NORTH

NOT TO SCALE

Source: Orange County Environmental Management Division 1986; Ziony & Jones, 1989

exhibit 5.5-1
Major Regional Faults

ANAHEIM SPORTS CENTER EIR

Earthquakes could also result in secondary seismic effects including landslides, liquefaction, and differential settlement. Since there are no major slopes on or in the immediate vicinity of the project site, there is no possibility of seismically induced landslides on the project site. Liquefaction occurs when loose, sandy, water-saturated soils are subject to strong seismic ground motion of substantial duration. Since groundwater levels are approximately 130 feet below the existing ground surface, the potential for damage due to liquefaction on the site is considered very low. Because the onsite soils deposits are generally dense across the site, the potential for damage from seismically induced differential settlement is considered low.

5.5.3 CUMULATIVE IMPACTS

Soils and geologic influences are very site specific, and there is little, if any, cumulative relationship between the development of the proposed project and the development of the cumulative projects identified in Section 4, General Description of Environmental Setting, of the EIR.

Development of the proposed project and the related projects may expose future populations to regional seismic hazards; however, seismic safety standards for new construction and ongoing provisions for emergency preparedness and response are anticipated to reduce such risk, on a project-by-project basis, to acceptable levels.

5.5.4 MITIGATION MEASURES

No significant geology impacts would occur; however, the following measures are standard conditions of the City of Anaheim for project development permits.

Mitigation Measure 5-1. Prior to approval of a grading plan, the property owner/developer shall submit to the City Engineer for review and approval, a soils and geological report for the area to be graded, based on proposed grading. The report shall be prepared by an engineering geologist and geotechnical engineer. All grading shall be in conformance with Title 17 of the City of Anaheim Municipal Code.

Mitigation Measure 5-2. Prior to the issuance of each building permit, the property owner/developer shall submit for review and approval, detailed foundation design information for the proposed buildings, prepared by a civil engineer, based on recommendations by a geotechnical engineer.

Mitigation Measure 5-3. Prior to the issuance of each foundation permit, the property owner/developer shall submit a report prepared by a geotechnical engineer for review and approval which shall investigate the subject foundation excavations.

Mitigation Measure 5-4. Prior to the issuance of each building permit, the property owner/developer shall submit plans showing that the proposed structure(s) has been analyzed for earthquake loading and designed according to the most recent seismic standards in the Uniform Building Code adopted by the City of Anaheim.

Mitigation Measure 5-5. Prior to final building inspection for the two proposed hotels and the baseball stadium, the property owner/developer shall submit an earthquake emergency response plan to the City of Anaheim Planning Department for review and approval. The plan shall require posted notices in all hotel rooms and throughout the stadium on earthquake safety procedures and incorporate ongoing earthquake training for hotel and stadium staff.

Mitigation Measure 5-6. During grading activities, the property owner/developer shall implement standard practices from City Ordinance (Title 17) and policies.

5.5.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Development of the proposed project would not be exposed to significant geology impacts.

5.6 HYDROLOGY AND WATER QUALITY

Information used for this section originates from several data sources that were prepared for the project area and/or the surrounding vicinity. These sources include *Anaheim Stadium Business Center Draft Environmental Impact Report* (City of Anaheim 1986), *Stadium Business Park EIR No. 277 Draft Environmental Impact Report* (Ultrasystems 1987), *Central Park Towers Draft Environmental Impact Report* (PBR 1990), and *City of Anaheim General Plan* (1984).

5.6.1 ENVIRONMENTAL CONDITIONS

Hydrology

Regional Conditions

The Santa Ana River, located adjacent to the project site, provides the backbone for the drainage system in the City. The Santa Ana River originates in the San Bernardino Mountains near Big Bear Lake and travels in a southwesterly direction to the sea at the Huntington Beach/Newport Beach city line. Historically, the river flowed continuously throughout the year; however, due to numerous alterations to the river, current flows are primarily intermittent. Flows throughout the year are dependent on discharges from Prado Dam, Metropolitan Water District (MWD) groundwater basin replenishment programs, and storm activity. The Orange County Flood Control District has jurisdiction over the Santa Ana River in the project vicinity.

Onsite Conditions

The project area is bisected by an underground drainage channel called the Southeast Anaheim Channel, which is maintained by the Orange County Environmental Management Agency (OCEMA). The channel, which was constructed in 1967, is 9-foot by 9-foot reinforced concrete box that discharges into the Santa Ana River north of Chapman Avenue. The drainage channel collects urban runoff from various tributary drains in southeast Anaheim and delivers the runoff to the Santa Ana River. The channel has been designed to convey the 100-year storm that generates a flow of approximately 910 cubic feet per second (cfs) (PBR 1990).

The project area is almost entirely covered with impermeable surfaces, as most of the nonbuilding areas are paved parking lots, except for minor strips of landscaping surrounding the existing stadium. Runoff in the project area occurs primarily through sheet flow across the parking areas in a southeast direction to the surrounding street system. According to the Anaheim General Plan, the street system

has been designed to convey the theoretical 10-year storm event while maintaining one dry lane in each direction. Catch basins located within the street system collect gutter runoff and transports it via the drainage system to the Southeast Anaheim Channel.

Flooding

Regional Conditions

Rainfall in the Santa Ana River watershed normally occurs on the winter months between November and April. The most recent flooding recorded along the Santa Ana River occurred in 1969, although flooding has been documented numerous times along its length.

The Federal Emergency Management Agency (FEMA) is responsible for designating flooding limits for areas along medium and large drainage courses. Flood Insurance Rate Maps (FIRM) are published by FEMA to indicate areas of potential flooding for various sized events, such as a 100-year event and a 500-year event.

Currently, a \$1.3 billion improvement project is occurring along the Santa Ana River that includes improvements to the Seven Oaks and Prado Dam, in addition to downstream channel facilities. These improvements are expected to provide the site and project area protection from a 100-year flood. However, improvements to these facilities, in particular Prado Dam, have been halted because of budgetary constraints.

Onsite Conditions

The project area is located within Zone AO and X designation. The AO zone has been identified in the community flood insurance study as an area of 100-year shallow flooding where depths are between 1 and 3 feet, while Zone X is subject to flooding during a 500-year storm or a 100-year storm with a flood depth of less than 1 foot. Thus, minimal flooding could be expected onsite during a 100-year event.

Water Quality

Regional Conditions

Water quality is relatively high at the upper end of the Santa Ana watershed, with water quality decreasing progressively in downstream urban areas. Major sources of pollutants include agricultural

runoff, wastewater treatment discharges, livestock waste, and poor quality water imported from the Colorado River. The Orange County Water District (OCWD) maintains historical records of water quality measurements below Prado Dam which show a gradual deterioration. The average total dissolved solids (TDS) for the river below Prado Dam have increased from the low 500s in late 1940s to levels in excess of 600 in the late 1980s and early 1990s.

Onsite Conditions

Water pumped from Santa Ana River Basin wells within the project area are naturally filtered in the underlying sand, rock strata, and soil. This water is generally delivered directly into the transmission and distribution mains without any treatment. Groundwater pumped into the City's reservoirs is disinfected to ensure sanitary quality. Treated water purchased from the MWD is filtered and disinfected at MWD's Diemer treatment plant in Yorba Linda. Untreated Colorado River water and state project water, or blends of both, purchased from MWD is received at the City's Walnut Canyon Reservoir via connections with MWD's Santiago Lateral. The water is, in turn, filtered and disinfected at the City's August F. Lenain Filtration Plant before distribution. This treatment process results in water quality that meets or exceeds drinking water standards.

Analysis for organic chemicals is routinely performed on all the City's drinking water wells and treatment plant. Nineteen wells out of 30 wells tested show at least trace amounts of contamination with volatile organic chemicals. Two of these wells are out of service because they exceed the maximum contaminant level (MCL) for trichloroethylene (TCE). Thirteen wells show trace amounts of freon compounds, and 11 wells have trace amounts of herbicides. Eighteen wells show trace amounts of other organic chemicals.

According to the OCWD, two wells are located on the project site. The first well is a monitoring well located on the eastern border of the property near the point where State Route 57 (Orange Freeway) crosses the Santa Ana River channel. The second well is a production well located to the south of the existing stadium. The most recent groundwater sample result taken in April and May 1995 at these wells, respectively, indicated that groundwater at both wells meets OCWD's primary drinking water standards (OCWD 1995). Moreover, the City has and continues to supply drinking water meeting all federal, state, and county drinking water regulations and has had no violations of the status that would warrant public notification. Surface water quality (e.g., runoff from storms) is generally poor due to the prominent use of the project area as parking facilities. In general, pollutants such as oil, petroleum, heavy metals, nutrients, and trash collect on the surface of the parking lot and are washed into the drainage system during storm events. During nonstorm events, the only source of runoff is from limited irrigation of landscaping and the washing of sidewalks for maintenance purposes. Catch

basins and gutters collect and direct runoff to the Southeast Anaheim Channel facility that extends along the western portion of the site which discharges to the Santa Ana River.

5.6.2 ENVIRONMENTAL IMPACTS

Thresholds of Significance

The proposed project is considered to have a significant impact if it would cause the following conditions:

- Substantially increase runoff rates beyond existing conditions
- Expose people or property to flooding
- Result in the degradation of water quality

Hydrology

Implementation of the proposed project would result in the construction of additional structures onsite to support the various uses, such as retail, stadium, entertainment, office, and hotel. Although no specific designs have been proposed, the drainage system necessary to support this type of development would likely include roof collection systems for structures, ribbon drains and sheet runoff within parking areas, and catch basins and onsite storm drains. Development of the project would not increase the amount of impervious surfaces; rather the orchard parking area would increase the amount of impervious surfaces on the project site. As a result, the runoff rates are expected to remain the same or decrease as compared to the existing conditions. The design of the drainage system would ultimately be reviewed by the City of Anaheim Public Works Department and the Orange County Flood Control District. Design requirements of these two agencies would ensure that runoff is properly conveyed and discharged into the Southeast Anaheim Channel. Impacts associated with the drainage system of the project are, therefore, considered less than significant.

Flooding

The project area is currently located within an area designated for limited flooding from the Santa Ana River. This designation will continue until such time that improvements to the Seven Oaks and Prado Dam and downstream channel facilities are implemented under the Santa Ana River improvement project. Flooding levels are expected to vary between 1 and 3 feet of flooding. Without further flood improvements to the Santa Ana River channel and a Letter of Map Revision to the FIRM map, uses proposed for the project area would be required to construct habitable structures at least 3 feet above flood levels and flood-proof all structures that are constructed below flood levels. Although detailed

design plans are not available at this stage of the planning process, habitable structures associated with the project would be constructed above the land at which a 100-year flood would occur onsite, in accordance with the City's Flood Hazard Reduction Ordinance. Mitigation measures will be required to ensure that future structures meet these standards or any other in effect at the time of the request for building permits.

Water Quality

Short-term

During grading and construction activities, there will be a potential for surface water runoff to carry sediment and small quantities of pollutants into the stormwater system. Soil erosion may occur along project boundaries during construction and in areas where temporary soil storage is required. Small quantities of pollutants, such as oil or other fluids used for construction, have the potential for entering the storm-drainage system, thereby degrading water quality.

Construction sites in excess of 5 acres are regulated by the National Pollutant Discharge Elimination Systems (NPDES) requirements as an industrial activity. In the State of California, the State Water Resources Control Board has issued a statewide "General Permit" for construction activities that require a NPDES permit. Under the NPDES regulations, individual development within the project area will be required to obtain a general permit with the RWQCB. The permit process includes filing a Notice of Intent (NOI) with the RWQCB at least 90 days prior to the onset of grading. The NOI includes a stormwater pollution prevention plan (SWPPP) that identifies what structural and nonstructural Best Management Practices (BMPs), such as sandbag dikes, temporary desilting basins, and spillways, will be used to reduce water quality impacts during construction. With the implementation of an SWPPP in conjunction with the NOI for the project area, short-term water quality impacts would be reduced to less-than-significant levels.

Long-term

Development within the project area would continue to allow stormwater to transport surface water contaminants from roadway surfaces, landscape areas, parking lots, and other exposed surfaces into the storm-drain system. In general, pollutants from these areas are most concentrated during the "first flush" of runoff, which occurs during the first 0.5 to 1.0 inches of rain. Typical urban contaminants (i.e., oils, grease, surfactants, heavy metals, solvents, pesticides, or nutrients) can be expected in the runoff reaching the storm drains in the project area. Long-term NPDES requirements contained within the SWPPP will also assist in the reduction of pollutants flowing into the storm-drainage system.

In addition, development within the project area would also require the conversion of surface parking lots to buildings and parking structures. Beneficial impacts would be associated with this conversion as rainfall would be captured on the roofs of structures and will not come into contact with vehicles or contaminants deposited in parking facilities. Thus, the contaminant load from vehicles in the stormwater runoff would be reduced. No adverse impacts are anticipated.

5.6.3 CUMULATIVE IMPACTS

The cumulative study area for hydrology, flooding, and water quality impacts is the Santa Ana River watershed. Current, known, and future projects within this study area will continue to increase impervious surfaces (which will increase runoff rates), place structures within flood-prone areas, and incrementally add to the amount of pollutants discharged into the drainage system. The proposed project would not result in a substantial adverse change to the existing conditions present within the cumulative study area. Rather, beneficial impacts could be anticipated with the development of the project. Consequently, the project's contribution to cumulative impacts is considered less than significant.

5.6.4 MITIGATION MEASURES

Hydrology

Mitigation Measures 6-1. Prior to the issuance of building permits, the property owner/developer shall submit a detailed drainage plan to the City of Anaheim Public Works Department and the Orange County Flood Control District for review and approval. This drainage report shall be in conformance with the City's Master Plan of Drainage, Drainage District Map 27. The drainage plan shall demonstrate that runoff will effectively be conveyed to the surrounding offsite drainage system and runoff rates would not affect receiving drainage facilities. More specifically, the drainage study shall examine the existing and the proposed conditions within the project limits and detail drainage deficiencies based upon the water elevations of the Santa Ana River in accordance with Drainage District Map 27. All drainage components shall be designed to the minimum requirements of the City and County.

Flooding

Mitigation Measure 6-2. Prior to the issuance of building permits, the property owner/developer shall submit plans documenting that the design of all aboveground structures (with the exception of

parking structures) shall be at least 1 foot higher than the 100-year flood zone. All structures below this level shall be flood-proofed to prevent damage to property or harm to people.

Mitigation Measure 6-3. Prior to the issuance of building permits, the property owner/developer shall demonstrate project conformance with the City's Flood Hazard Reduction Ordinance No. 4136 (Chapter 17.28 of the Anaheim Municipal Code) to the City of Anaheim Public Works Department, which pertains to properties that lie within the "AO" Flood Hazard Zone (Anaheim Floodplain Overlay Zone).

Water Quality

Mitigation Measures 6-4. At least 90 days prior to the initiation of grading activities, a NOI shall be filed with the RWQCB by the property owner/developer pursuant to the NPDES. The NOI shall include a Stormwater Pollution Prevention Plan which describes the structural and nonstructural Best Management Practices that will be implemented during construction within the project area as well as BMPs for long-term operation of the project area. Long-term measures could include, but may not be limited to, street-sweeping, trash collection, proper materials storage, designated wash areas connected to sanitary sewers, filter and grease traps, and clarifiers for surface parking areas.

5.6.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant impacts have been identified. With the incorporation of identified mitigation measures, potentially significant impacts would be avoided, and project design would be consistent with City, County, and state requirements for hydrology and water quality.

5.7 EMPLOYMENT, POPULATION, AND HOUSING

This section analyzes the employment, population, and housing conditions potentially affected by the Anaheim Sports Center. The following geographic zones were analyzed:

- City of Anaheim. The City of Anaheim is addressed with respect to employment, population, and housing.
- Orange County Subregion. The Southern California Association of Governments (SCAG) analyzes jobs/housing balance at the subregional level. The project is located in the Orange County Subregion.

The following sources were used in the preparation of this section:

- 1994 SCAG Growth Management Plan (Orange County Subregion)
- 1990 U.S. Census Bureau Data (City of Anaheim and Orange County)
- California Employment Development Department (Current Service Sector Job Gains Between 1993 and 1994 and Unemployment Rates for 1994 for City of Anaheim and Orange County)
- City of Anaheim (Census Data from 1980 through 1994)
- Anaheim Stadium Operations (1994 Employment Data for the Existing Stadium and Related Operations)

5.7.1 **ENVIRONMENTAL CONDITIONS**

Employment

Recent Employment Trends

Table 5.7-1, Recent Employment Trends in Two Zones Around the Project Area, 1980-1990, summarizes the 1980 to 1990 historical trend in total employment around the project site as forecasted by SCAG. These data show that employment from 1980 to 1990 increased dramatically in both geographic zones: employment increased 17 percent (about 24,000 new jobs) in the City of Anaheim and 43 percent (about 388,691 new jobs) in the Subregion.

TABLE 5.7-1
RECENT EMPLOYMENT TRENDS IN TWO ZONES
AROUND THE PROJECT AREA, 1980 TO 1990

Geographic Zone	1980	1990	1980 to 1990 (Change)
			Percent
City of Anaheim	144,923	169,351	+ 17
Orange County Subregion	912,309	1,301,000	+ 43

Source: SCAG 1994; City of Anaheim 1994.

These relative and absolute increases in employment growth in both geographic zones between 1980 and 1990 reflect the continuing development of Southern California into one of the major metropolitan regions in the world.

The overall development of the region has been fueled by: (1) continued population and manufacturing growth in Los Angeles County; (2) the transformation of Orange County from a suburban bedroom community that housed workers employed in Los Angeles County into a major manufacturing, tourism, and professional services center that competes successfully in regional, national, and international markets; and (3) the development of San Bernardino and Riverside counties into major residential communities that supply workers to the growing manufacturing and services sector employers located in Orange and Los Angeles counties.

One study suggests that Anaheim's rapid growth over the past decade has resulted in its emergence as the principal city within a new Central Orange County "urban core" (Robert Charles Lesser and Company 1989) consisting of Anaheim, Garden Grove, Tustin, and Santa Ana. Urban cores are defined in this study as a feature of post-industrial metropolitan structure consisting of multiple centers with concentrations of regional and export-oriented employment. The study suggests that there are 26 such urban cores in the greater Los Angeles metropolitan area, four of which are located in the Central Orange County urban core. By 1990, the Central Orange County Core was the second-fastest growing core not only within Orange County, but also among all urban cores in the state and was superseded only by a neighboring Orange County urban core that includes the John Wayne Airport area, Irvine, and Costa Mesa. According to this analysis, Anaheim's rapid growth is due largely to its superior freeway access and availability of housing, including its supply of executive housing in

the Anaheim Hills area, together these factors have made the City an attractive location for office space users and subregional headquarters of major corporations.

Employment trends in the early 1990s show significant job loss in Orange County. Between May 1991 and May 1992, 29,600 non-agricultural jobs were lost in the County: of the jobs lost, 2,900 were in the service sector of the economy (California Employment Development Department, 1992.) More recent employment trends show a gain of 11,000 non-agricultural jobs in the County from 1,115,400 in 1993, to 1,126,400 in 1994 (Reed, pers. comm., 1995).

Table 5.7-2, Unemployment Rate Trends in the City of Anaheim and Orange County, 1980 to 1994, summarizes the trend in unemployment rates in the City of Anaheim and Orange County as a whole. These data show that 1980 unemployment rates in Anaheim and the County were essentially the same (4.3 compared to 4.7 percent), and that by 1990, the unemployment rate in both zones declined about 1 percent, based on California Employment Development Department data for Orange County. However, unemployment has increased since 1990. Unemployment rates in Anaheim increased by 3 percent to 6.7 percent in 1994 (a 45 percent increase in unemployment), and by 2.5 percent to 5.8 percent in the County (a 43 percent increase in unemployment).

TABLE 5.7-2
UNEMPLOYMENT RATE TRENDS IN THE CITY OF ANAHEIM
AND ORANGE COUNTY, 1980 TO 1994

Geographic Zone	1980 (percent)	1990 (percent)	1994 (percent)	1980 to 1990 (Change)		1990 to 1994 (Change)	
				Amount	Percent	Amount	Percent
City of Anaheim	4.7	3.7	6.7	-1.0	-21	+3.0	+45
Orange County	4.3	3.3	5.8	-1.0	-23	+2.5	+43
Source: City of Anaheim 1994; California Employment Development Department, Labor Marketing Information Systems July 1995.							

Future Employment

SCAG's 1994 forecast of employment for 2000 and 2010 for each of the two geographic zones around the project area is shown in Table 5.7-3, Employment Forecasts for Two Zones Around the Project Area, 2000 to 2010. Unlike the employment trends from 1980 to 1990 reported in Table 5.7-1,

SCAG's employment forecast predicts a 12 percent rate of growth within the City of Anaheim and a 21 percent rate of growth within the Subregion in the future. Overall, SCAG forecasts employment increases of 28 percent for Anaheim and 45 percent for the Subregion from 1990 to 2010.

TABLE 5.7-3
EMPLOYMENT FORECASTS FOR TWO ZONES
AROUND THE PROJECT AREA, 2000 TO 2010

Geographic Zone	2000	2010	2000 to 2010 (Change)		1990 to 2010 (Change)	
			Amount	Percent	Amount	Percent
City of Anaheim	192,785	216,218	+23,433	+12	+46,800	+28
Orange County Subregion	1,558,000	1,886,000	+328,000	+21	+585,000	+45

Source: SCAG 1994; City of Anaheim 1994.

Although the rate of employment growth in both zones is forecast to decline during the 1990 to 2000 decline period, and again from 2000 to 2010—relative to the increases recorded from 1980 to 1990, the projected absolute increases in employment are nonetheless substantial. The 1990 to 2000 increase is forecast to be 14 percent in Anaheim and 20 percent in the Subregion. As shown in Table 5.7-3, the total increase over the 20-year period from 1990 to 2010 is forecast to range from about 47,000 employees in Anaheim to about 585,000 in the Subregion.

Even prior to the economic recession, a number of factors were predicted to contribute to the slowing rate of job creation over the next 20 years, especially within Orange County. First and most importantly are the high costs of land and housing and the congestion-related costs of travel (such as length of time required to commute, loss of revenue producing time, and costs incurred due to delays) which are expected to encourage more residential development in outlying areas, such as Riverside and San Bernardino counties, when compared to Orange County. Lower land costs and a larger supply of resident workers in these outlying areas are also expected to cause employers to follow the labor force. Second, the age distribution is projected to shift upward and reduce the size of the potential labor force. Analysts in Orange County expect the percentage of work-age residents (16 to 64 years) to decline from the current 68 percent of the County population to 67 percent by 2010, and continue declining to 63 percent by 2020, as reported by the Orange County Administrative Office (OCP-92). However, several factors are likely to offset—at least partially—the decreasing percentage of the population in this age group. First, SCAG's projected increases in the absolute size

of the labor force over the 1990 to 2010 period, based on increases in the total county population, are substantial. Second, national-level projections of labor force participation rates by the U.S. Bureau of Labor Statistics show that the percentage of work-age persons active in the labor force is expected to increase from 65.6 percent in 1987 to 67.8 percent by 2000. Therefore, even though the percentage of the total population in the work-age group is projected to decline, that decreased percentage will represent a substantially larger number of the work-age people.

Resident Workers

Resident workers are those persons who reside and are members of the labor force within the same geographic area. Table 5.7-4, Resident Worker Trends in Two Zones Around the Project Area, 1980 to 1990, summarizes the 1980 to 1990 trend in the number of "resident workers" in each of the two geographic zones around the Anaheim Sports Center. These data show a consistent growth trend across both geographic areas. In Anaheim, the number of resident workers increased by 10 percent over the decade, while the SCAG Subregion experienced an increase of 40 percent. In absolute terms, the increases in resident workers range from about 12,000 additional working residents in Anaheim to about 296,000 additional working residents in the Subregion.

TABLE 5.7-4
RESIDENT WORKER TRENDS IN TWO ZONES
AROUND THE PROJECT AREA, 1980 TO 1990

Geographic Zone	1980	1990	1980 to 1990 (Change)	
			Amount	Percent
City of Anaheim	119,707	131,438	+ 11,731	+ 10
Orange County Subregion	746,845	1,043,418	+296,573	+40

Source: City of Anaheim 1994; SCAG July 1995.

These trends indicate that in each of the geographic zones around the project area, the size of the resident labor force grew less rapidly than employment, in absolute and relative terms. For example, while employment grew by 17 percent in Anaheim from 1980 to 1990, the resident labor force grew at about 10 percent. In absolute terms, employment grew by about 24,000 persons while the resident labor force grew by about 12,000 persons. The more rapid growth in employment relative to the resident labor force is consistent with the continued transformation of Orange County—and in this case

Anaheim and the Subregion—from its residential/agricultural roots into a major urban employment center that attracts employees from outside the City's boundaries.

Future Resident Workers

Projected growth in the number of resident workers to 2010 is shown in Table 5.7-5, Resident Worker Forecast for Two Zones Around the Project Area, 2000-2010, for each of the geographic zones around the project area. In percentage terms, the number of resident workers in the Subregion is projected to grow 9 percent from 2000 to 2010, while Anaheim's resident labor force is expected to grow 14 percent over the same period. Over the 1990 to 2010 period, Anaheim's growth in resident workers will outpace employment growth (an increase of 28 percent employment growth when compared to an increase of 32 percent resident worker growth). But in the Subregion, employment will grow faster than the resident worker population (an increase of 45 percent employment growth when compared to an increase of 30 percent resident worker growth).

TABLE 5.7-5
RESIDENT WORKER FORECAST FOR TWO ZONES
AROUND THE PROJECT AREA, 2000 TO 2010

Geographic Zone	2000	2010	2000 to 2010 (Change)		1990 to 2010 (Change)	
			Amount	Percent	Amount	Percent
City of Anaheim	152,589	173,739	+21,150	+14	+42,300	+32
Orange County Subregion	1,250,455	1,361,504	+111,049	+9	+318,086	+30

Source: City of Anaheim 1994; SCAG July 1995; MBA 1995.

Population

Recent Population Size Trends

Table 5.7-6, Recent Population Trends in Two Zones Around the Project Area, 1980 to 1990, summarizes the 1980 to 1990 trend in population for the two geographic zones around the project area. The 1990 census data show that the City of Anaheim grew much faster over the decade than was assumed in SCAG's regional growth forecast. The Anaheim population grew by about 47,000 people, and the Subregion grew by about 478,000 between 1980 and 1990.

TABLE 5.7-6
RECENT POPULATION TRENDS IN TWO ZONES
AROUND THE PROJECT AREA, 1980 TO 1990

Geographic Zone	1980*	1990	1980-1990 (Change)	
			Amount	Percent
City of Anaheim	219,311	266,406 ^a	+47,095 ^a	+21 ^a
		250,313 ^b	+31,002 ^c	+14 ^c
Orange County Subregion	1,932,709	2,410,556 ^a	+477,847 ^a	+25 ^a
		2,411,000 ^b	+478,291 ^c	+20 ^c

* Actual, based on U.S. Census data.
b SCAG forecast, for comparison.
c Difference between 1980 Census data and SCAG projections.

Source: City of Anaheim 1994.

The California Department of Finance, Demographic Research Unit, prepares population estimates in between census years. In January 1995, the population estimate for the City of Anaheim was 296,497, an 11 percent increase in population from 1990, which equates to a 2.2 percent annual increase. This population growth rate continues the pace of growth, which took between 1980 and 1990.

Future Population Size

Table 5.7-7, Population Forecast for Two Zones Around the Project Area, 2000 to 2010, summarizes SCAG's population projections for the 1990 to 2010 period. Overall, the City of Anaheim projects the population will increase by 39 percent between 1990 to 2010. SCAG estimates that Orange County's population will increase by about 29 percent between 1990 and 2010, due in part to the potential for considerable residential development in the southern portion of the County.

Although the rate of population growth in the SCAG forecast is expected to moderate somewhat in each zone over the projection period, the absolute increases in population between 1990 and 2010 are nonetheless substantial. About 104,000 people beyond the 1990 population are expected to reside in Anaheim by 2010 and about 457,444 more in the Orange County Subregion.

TABLE 5.7-7
POPULATION FORECAST FOR TWO ZONES
AROUND THE PROJECT AREA, 2000 TO 2010

Geographic Zone	2000	2010	2000 to 2010 (Change)		1990 to 2010 (Change)	
			Amount	Percent	Amount	Percent
City of Anaheim	329,946	370,456	+40,510	+12	+104,050	+39
Orange County Subregion	2,868,000	3,108,000	+240,000	+8	+697,000	+29

Source: SCAG 1994; City of Anaheim 1994 and OCP 92.

Population Age Distribution

Table 5.7-8, Age Distribution and Median Age Trends in Two Zones Around the Project Area, 1980-1990, summarizes the age distribution and median age of the population. These data show a consistent pattern of an aging population in both zones.

TABLE 5.7-8
AGE DISTRIBUTION AND MEDIAN AGE TRENDS IN TWO ZONES
AROUND THE PROJECT AREA, 1980 TO 1990

Geographic Zone	1980			1990			Median Age	
	Age Distribution (Percent)			Age Distribution (Percent)				
	0-17	18-64	65+	0-17	18-64	+65		
City of Anaheim	27	65	8	28.8	26	66	8	28.9
Orange County Subregion	27	65	8	29.5	24	67	9	30.4

Source: City of Anaheim 1994.

Although there are no known projections of the population age distribution to 2010 available at the city and census tract levels, two such projections have been made for Orange County. Both projections suggest that the aging trend in the population from 1980 to 1990 (described below) is likely to continue, but at a slower rate. Woods & Poole Economics, an econometric and demographic

forecasting group, projects that the median age of the population in Orange County will increase to 30.4 years in 1990 and to 36.4 years in 2010. Furthermore, their projections indicate that the percentage of persons between 20 and 64 will fall from 63.4 percent in 1990 to 62.9 percent in 2010 (Woods & Poole, 1990).

Housing

Table 5.7-9, Recent Housing Stock Trends in Two Zones Around the Project Area, 1980 to 1990, summarizes the past trend in the age and amount of housing stock in each of the two geographic zones around the project area. These data show that the percentage increases in the size of the housing stock are similar (12 to 13 percent) in the City of Anaheim and 21 percent for the Subregion. Over the decade, about 10,500 units were added in Anaheim, an approximate 1.4 percent annual growth rate, and about 153,500 were added in the Subregion. Moreover, according to the California Department of Finance, Orange County Population and Housing Estimates, January 1995, approximately 97,483 housing units were located within the City of Anaheim. This indicates that approximately 4,306 more housing units were added within the City between 1990 and 1995, or a 5 percent increase over the 1990 levels, growth at half the rate of the population.

TABLE 5.7-9
RECENT HOUSING STOCK TRENDS IN TWO ZONES
AROUND THE PROJECT AREA, 1980 TO 1990

Geographic Zone	1980	1990	1980 to 1990 (Change)		Percentage of Units Vacant (1990)
			Amount	Percent	
City of Anaheim	82,647 ^a	93,177 ^a	+ 10,530	+ 13	6
	--	92,567 ^b	+ 9,920 ^c	+ 12	--
Orange County Subregion	721,514 ^a	153,558 ^a	+ 153,558	+ 21	4.4
	--	153,486 ^b	+ 153,486 ^c	+ 21	--

* Actual, based on Census data.
b SCAG estimate, for comparison.
c Difference between 1980 Census data and SCAG projections.

Source: City of Anaheim 1994.

SCAG's forecast of housing construction in the two geographic zones is shown in Table 5.7-10, Housing Construction Forecast for Two Zones Around the Project Area, 2000 and 2010. The housing unit counts for 1990 and 2000 are based on the SCAG Growth Management Plan forecast for 1990 to 2010.

City housing programs are discussed in Section 5.1, Land Use and Related Planning Programs, of this EIR.

TABLE 5.7-10
HOUSING CONSTRUCTION FORECAST FOR TWO ZONES
AROUND THE PROJECT AREA, 2000 TO 2010

Geographic Zone	2000	2010	2000 to 2010 (Change)		1990 to 2010 (Change)	
			Amount	Percent	Amount	Percent
City of Anaheim	105,992	119,418	+13,426	+13	+26,241	+28
Orange County Subregion	1,005,000	1,092,000	+87,000	+9	+217,000	+25

Source: City of Anaheim 1994.

5.7.2 ENVIRONMENTAL IMPACTS

Thresholds of Significance

An impact is considered to be significant if the project will:

- Hinder or reduce employment opportunities.
- Induce substantial growth or concentration of population beyond which could be accommodated by the affected cities and communities.
- Conflict with adopted environmental plans and goals of a community.
- Create demand for housing that exceeds the available supply.

Employment

Development of the Anaheim Sports Center will directly add new jobs as a result of construction and operation. The influence of the proposed Anaheim Sports Center on the job market is not expected to generate significant growth beyond the growth assumed in regional plans. This project will also

induce new jobs as a result of income spent by workers filling these direct jobs, resulting in indirect employment, to the extent that direct employment leads to local purchases of materials and services. Indirect and induced employment impacts are not directly related to or under the control of the City of Anaheim. Indirect and induced employment impacts result from the actions and decisions of businesses, workers, and households that benefit from the demand for goods and services required to construct, develop, and maintain businesses within the Anaheim Sports Center. The additional employment generated by the future development is considered a beneficial impact to job growth in Anaheim and the region.

Table 5.7-11, Estimated Net Employment From the Anaheim Sports Center, presents an estimate of the number of new jobs that will be created as a result of the land uses proposed as part of the Anaheim Sports Center. As shown, development of the Anaheim Sports Center will create 3,879 new jobs. These job opportunities are approximately 50 percent greater than the 2,600 service sector jobs gained in Orange County between 1993 and 1994 (Reed, pers. comm., 1995). It should be noted that a small number of jobs will be dislocated because of the removal of the existing commercial/office uses in the northwestern corner of the project site. However, there may be opportunities for these uses to be relocated within the area or onsite as part of the Anaheim Sports Center development. Moreover, acquisition of all real or other property interests, required as part of the project, will be conducted in compliance with all legal requirements. Relocation assistance described in 42 U.S.C. 4601 et seq. and California Government Code Section 7260 et seq. will be extended to any eligible displacee. Overall, jobs to be generated by the proposed project will be phased over time.

TABLE 5.7-11
ESTIMATED ADDITIONAL EMPLOYMENT FROM THE ANAHEIM SPORTS CENTER

Land Use	Employment Generation Factor ^a	Additional Employment
Hotels (500 Rooms)	1.11/room	555
Urban Entertainment/Retail (750,000 sq ft)	564 sq ft/employee	1,330
Office (900,000 sq ft)	463 sq ft/employee	1,944
Stadium ^b		50
Total Employment Increase	--	3,879

^a Based on Orange County data supplied by SCAG.
^b The existing stadium has 50 employees; this number assumed to double with the development of a new stadium.

Source: Anaheim Stadium Operations, March 1995; SCAG, July 1995.

Since SCAG projections are based on full-time employment numbers, for the purposes of this analysis only full-time employment numbers employment by the Anaheim Sports Center will be used to determine potential impacts.

The net increase of 3,879 year-round jobs from development of the Anaheim Sports Center represents a relatively small percentage of the SCAG employment forecast for Anaheim in 2010 (less than 2 percent) (refer to Table 5.7-3). However, new year-round jobs projected to be generated by development of the Anaheim Sports Center accounts for about 8 percent of the new jobs forecast to be added in Anaheim between 1990 and 2010 (refer to Table 5.7-3). These jobs represent about 0.2 percent of the employment forecasted by SCAG for the Subregion in 2010 and about 0.7 percent of employment growth forecasted for the Subregion from 1990 to 2010. Further, the number of job opportunities generated by development of the Anaheim Sports Center will be equal to 9 percent of the 1990 to 2010 increase in the City's resident labor force and 1.2 percent of the 1990 to 2010 increase within the SCAG subregion workers, according to the SCAG forecast (refer to Table 5.7-5).

Approximately 50 percent of employment opportunities within the Anaheim Sports Center are visitor-serving commercial (entertainment/retail) uses including recreational facilities, hotels, retail, and restaurant uses. The balance of the employment opportunities will be in office/professional. These service-related positions generally do not require a highly skilled or educated labor force. The nature of these opportunities suggests that the potential labor supply in the City and Subregion will exceed the demand for additional labor indirectly generated by the project. It is likely that the majority of the employees would be currently found in the subregional resident labor force. The implementation of the project is not expected to induce significant migration into Southern California or substantially increase intra-urban migration, because unemployment in 1994 was at 6.7 percent in Anaheim and 5.8 percent in the County. In addition, many positions in entertainment/retail businesses (especially retail trade and restaurants and bars) will use student and part-time employees.

In addition to the 3,879 year-round jobs to be generated from development of the project, indirect employment in other economic sectors will result, including jobs in the retail, commercial, and industrial sectors. Further, the construction of the Anaheim Sports Center would provide construction job opportunities. This is considered a beneficial impact. Construction employees typically do not permanently relocate for a project. In addition, unemployment in the construction field is high and there are many unemployed/underemployed construction workers in the region who would not have to relocate for project employment. Because of the temporary nature of construction, the availability of construction jobs, this is not expected to result in significant impacts on population or housing growth in the area.

Population

No residential development is proposed. Therefore, the project will not result in a direct increase in population in Anaheim or the Subregion. To the extent that employees associated with development within the Anaheim Sports Center result in net new households in the area, a direct increase in population would occur. As noted in the Housing Impacts discussion below, this population increase is not expected to result in significant housing impacts.

As previously noted, it is estimated that a maximum of 3,879 new year-round employment opportunities would be generated by the development of the Anaheim Sports Center. Of that, 1,885 new employees are expected to serve the hotel and entertainment/retail uses at the project. Based on *An Assessment of the Employment, Population, Housing and Jobs-Housing Balance Impacts of The Disneyland Resort* (HR&A, 1992), it is estimated that 42 percent of the employees would be primary wage earners and in a position of making a decision of whether to relocate for a job opportunity. Approximately 13.3 percent of the primary wage earners are expected to relocate to Anaheim for employment at the Anaheim Sports Center.¹ These relocations would result in 105 new area residents/households from hotel and entertainment/retail employment.

Implementation of the proposed project is expected to result in 1,944 office employees (in the office towers) and 50 employees (for stadium management). Of the 1,994 employees, 75 percent of the office employees are expected to be primary wage earners, with approximately 25 percent relocating to Anaheim for employment. This will result in 374 new residents/households from office employment.

The project will indirectly result in the addition of approximately 479 new households to Anaheim. Assuming only one Anaheim Sports Center employee per new household—at the City average of 3.195 persons per household—the new households would result in 1,530 new residents. The anticipated population increase from the employment generated by the Anaheim Sports Center would not result in significant population impacts because the estimated population increase associated with the employment growth is well within 4 percent of the population growth projection for the City from 1990 to 2010 (see Table 5.7-7).

¹

Although entertainment/retail was not specifically addressed in the HR&A report, theme park employees (of which much of the work is retail/entertainment) was included. The percentage of primary wage earners in this category who relocated was 9.2 percent; 13.3 percent was used in this analysis to be conservative.

Housing Impacts

As previously noted, the project does not include the construction of any new dwelling units; no existing residential units would be removed. The projected indirect employment increase generated by development of the Anaheim Sports Center may result in an increase in the demand for housing within the City of Anaheim. The potential impact of increased employment on housing is discussed below.

The additional employment opportunities generated by the Anaheim Sports Center project are not anticipated to attract a significant number of employees from outside the Subregion. The types of positions that will be available do not generally require a high level of skill or education unavailable among resident workers in the City and Subregion. However, these employment opportunities may encourage a number of workers within the Region or Subregion to move into the City of Anaheim to be closer to their place of employment. A number of factors affect a household's decision to relocate, including whether the employee is a full- or part-time worker and is a primary or secondary wage earner within the household. It is projected that development of the Anaheim Sports Center may result in 479 new employees moving to Anaheim from outside the City. Because the unemployment rate is currently over 5 percent in Orange County, and was 6.7 percent in 1994 in Anaheim, many of the future employees are expected to be currently unemployed residents of the City of Anaheim and surrounding areas of Orange County which would reduce the number of employees potentially relocating to the City.

The demand for 479 housing units by 2010 represents 1.8 percent of the projected increase in the City's housing stock from 1990 to 2010 and 0.2 percent of the total number of housing units projected for the City in 2010. The current vacancy rate of 6.2 percent for the City indicates the availability of approximately 6,044 dwelling units (California Department of Finance, January 1, 1995). Therefore, based on the size of the need for housing compared to projected housing availability, this housing demand is not anticipated to be an impact.

Although there are no significant impacts anticipated with regard to the number of housing units needed by employees moving to Anaheim because of the development of the Anaheim Sports Center, this EIR also addresses the affordability of currently available housing compared to the salary ranges of new employees. As indicated previously, approximately 479 employees are anticipated to move into the City as a result of the Anaheim Sports Center. Of these 479 employees, it is unknown how many would require some type of subsidized or affordable housing (i.e., would have to pay more than 30 percent of their monthly income for housing costs). It is assumed that some of these employees

will meet the criteria for subsidized or affordable housing needs—as defined by HUD—depending on the current salaries and rents and the number of wage earners within the household.

5.7.3 CUMULATIVE IMPACTS

The study area for employment, population, and housing is the City of Anaheim which is located in the Orange County Subregion, as identified by SCAG.

One way to analyze potential employment effects of the related projects is to use commonly accepted employment density factors (e.g., employees per square foot of development use or per room for hotels/motels). Using this methodology and specific employments numbers provided in the Disneyland Resort EIR, it is estimated that the implementation of the related projects would generate approximately 32,065 new jobs. The estimated employment generated by these projects is within the SCAG forecasts of an increase of approximately 46,000 new jobs in Anaheim and 585,000 new jobs within the Subregion between 1990 and 2010.

Employment opportunities created by the Anaheim Sports Center and related projects is expected to be 35,944 jobs. Comparing the total cumulative employment with SCAG forecasts indicates that the total cumulative employment represents roughly 17 and 2 percent of the total employment in the City of Anaheim and the Subregion, respectively, in the year 2010, and 78 percent and 6 percent of the 1990 to 2010 employment growth forecast for the City of Anaheim and the Subregion, respectively. Thus, the total number of jobs that will be created by development of the Anaheim Sports Center and the related projects is within SCAG projections for the City of Anaheim and the Subregion.

Because no dwelling units are proposed as part of the Anaheim Sports Center or related projects, no direct increase within Anaheim or the Subregion would occur. An indirect increase in population would occur due to employee relocation.

The cumulative increases in employment, housing, and population associated with the Anaheim Sports Center and related projects are within the SCAG forecasts. Therefore, these impacts are less than significant.

5.7.4 MITIGATION MEASURES

Existing City policies and the activities of the City of Anaheim Housing Authority provide for the housing needs of the City. No additional mitigation measures are provided for because no significant impacts on the provision of necessary levels of housing are anticipated. The City's housing needs for

all income levels are accommodated through the programs and policies of the General Plan Housing Element, which by law is reviewed and updated every 5 years based upon housing production targets set by SCAG. The next programmed General Housing Element update is scheduled for July 1996.

5.7.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

There will be no unavoidable adverse impacts of the project related to employment, population, and housing.

5.8 PUBLIC SERVICES, UTILITIES AND ENERGY CONSUMPTION

This section provides baseline information on, and evaluates potential impacts to, public services, utilities, and energy conservation practices and policies related to the development of the Anaheim Sports Center. Information provided in this section is based on correspondence with, and information provided by, the public services and utilities providers having jurisdiction over the project site. Additional information that has been used includes the *Public Services and Utilities Technical Report* (water, wastewater, drainage, and electricity) prepared by IWA Engineers, January 1996, and the *Anaheim Resort Specific Plan Environmental Impact Report*, adopted in September 1994. The energy consumption rates are based on information provided in the April 1993 SCAQMD Air Quality Handbook.

As indicated previously, the project would involve the implementation of a new 70,500 seat football stadium and a renovated 45,000 seat Anaheim Stadium for baseball or a new 45,000 seat baseball stadium and a renovated 70,500 seat Anaheim Stadium for football. Although the project would introduce an additional 45,000 seats onsite, the stadiums presented in these scenarios would not operate at the same time. Consequently, potential impacts on services such as fire, police, solid waste, parks, and utilities such as electricity, natural gas, telecommunications (cable, telephone, etc.) would not occur as a result of the additional stadium and, therefore, was not evaluated in this section. Also note that the project assumes that use of the existing exhibition center space (150,000 square feet) would only occur during times in which a major stadium sporting event is not taking place, as is the current practice. Therefore, the exhibition center would not increase the project's projected maximum demand and/or generation on services or utilities and, therefore, was not evaluated in this section. However, during the very rare occasion when a special sporting event such as a Super Bowl or World Series occurs on the project site, exhibition space for related activities such as the National Football League Experience, All-Star FanFest, etc. would be utilized concurrently. It should be noted, though, that a majority of those people attending a Super Bowl or World Series would also attend these event-related exhibition activities.

It should be noted that impacts to water and wastewater services and facilities will differ dependent on which stadium scenario is developed. A more detailed description of these impacts is provided later in this section under water and wastewater.

5.8.1 FIRE AND EMERGENCY/MEDICAL SERVICES

Environmental Conditions

Fire and emergency/medical services for the Anaheim Sports Center site are provided through the City of Anaheim Fire Department and Anaheim Stadium Operations Department.

Fire Prevention

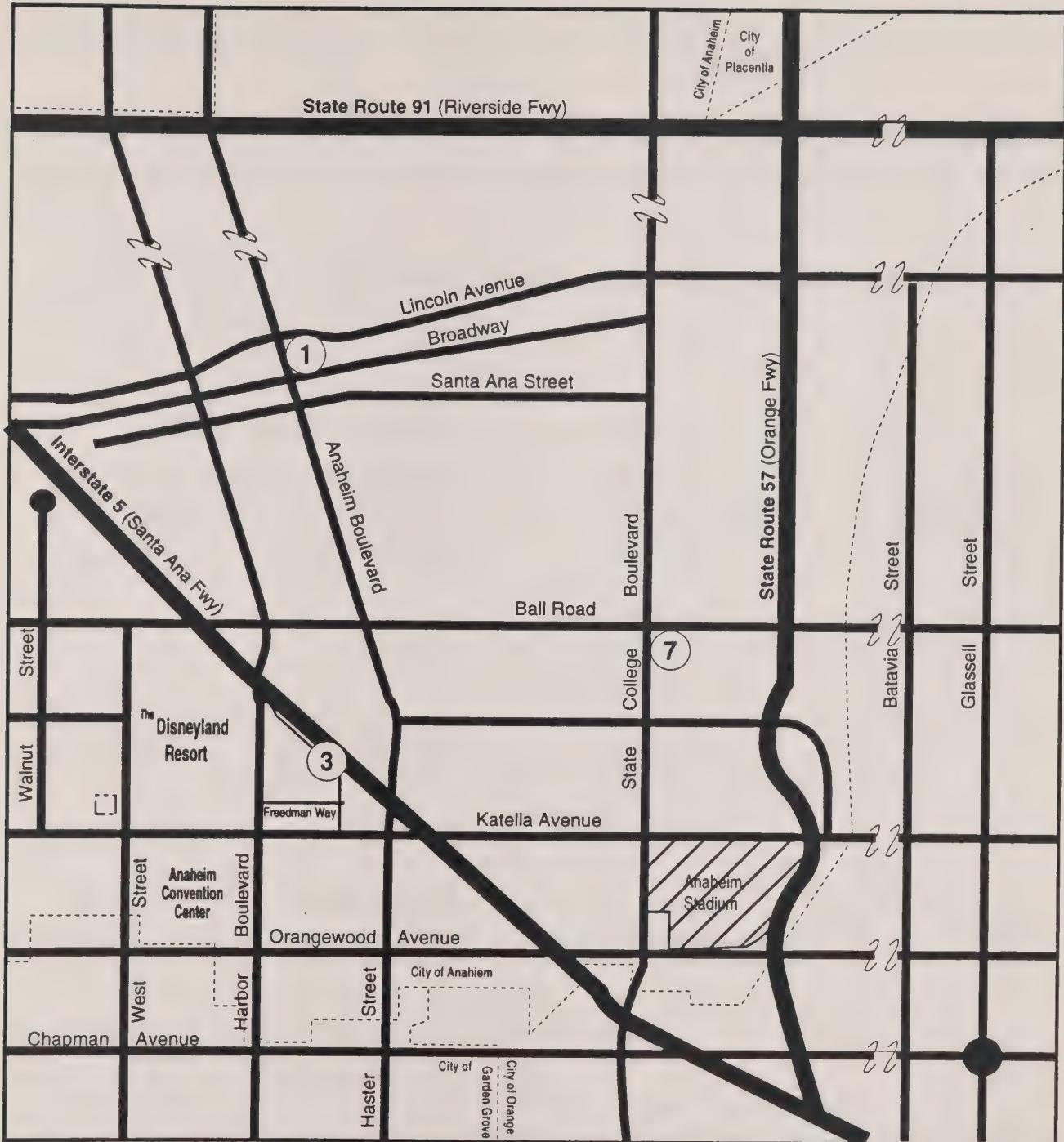
The City of Anaheim Fire Department's fire prevention, inspection and permit services are provided through the fire companies located in Fire Stations 1, 3, and 7, and through the Department's Fire Prevention Division. The Fire Prevention Division currently has one inspector assigned to the Anaheim Stadium and Convention Center area. Hazardous materials disclosure and underground storage tank activities are also handled through the Fire Prevention Division.

Fire and Emergency/Medical Services

The Anaheim Fire Department provides fire protection emergency medical response services for the Anaheim Sports Center site. Three Anaheim fire stations provide primary service to the project site (see Exhibit 5.8-1).

- Fire Station 1 is located at 500 East Broadway Street. It houses one four-person fire engine company (suppression unit) and one four-person squad truck company, and one four-person engine (paramedic-suppression unit) company.
- Fire Station 3 is located at 1580 South Manchester Street. It serves as a battalion headquarters which houses a Suppression Battalion Chief, a four-person paramedic engine company, and a four-person truck company.
- Fire Station 7 is located at 2222 East Ball Road. This station houses a four-person paramedic company.

In addition, a future fire station is planned for the area, as the need was projected for the Anaheim Stadium Business Center in the City of Anaheim to serve approximately 2,118,480 square feet of commercial, 15,942,000 square feet of office, and 2,797,000 square feet of industrial development in the project area. The station is intended to house a four-person paramedic engine company and a four-person truck company. Based on 1989 projected response times, the station was originally scheduled to open in 1996; however, current response time projections do not support the need for



LEGEND



Project Site



Fire Station Number



NORTH

NOT TO SCALE

Source: City of Anaheim, June 1995.

exhibit 5.8-1
Fire Station Location Map
ANAHEIM SPORTS CENTER EIR



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this opening date. The Anaheim Fire Department will recommend the construction of the new station when demands for emergency service meet or exceed the Department's ability to meet response time standards.

Anaheim Fire Department station locations, equipment, and personnel serving the project area are summarized in Table 5.8-1.

TABLE 5.8-1
EXISTING FIRE STATION LOCATIONS, EQUIPMENT, AND STAFFING

Fire Station	Location	Equipment	Personnel
Fire Station 1*	500 East Broadway Street	1 engine company (suppression unit) 1 engine company (paramedic/suppression unit) 1 squad truck company (light/air unit)	12
Fire Station 3	1580 South Clementine Street	1 engine company (paramedic/suppression unit) 1 truck company (ladders, watertank, pump) 1 Battalion Chief vehicle	9
Fire Station 7	2222 East Ball Road	1 engine company (paramedic/suppression unit)	4

* Stations providing primary service to the project area.

Source: City of Anaheim Fire Department, January 1996.

The Anaheim Fire Department is a party to the Orange County and California State Mutual Aid Agreement. The Department has automatic aid agreements with all of Anaheim's neighboring jurisdictions. Additional fire and emergency medical response services are provided to the Anaheim Sports Center site by the City of Orange Fire Station, located at 345 City Drive South, through an automatic aid agreement. One four-man engine company (suppression unit) is housed at this station. As part of their involvement with the California Office of Emergency Services (OES), the Anaheim Fire Department also provides for light urban search and rescue services, such as swift water rescue,

high-angle (building, mountain, etc.) rescue, and other specialized search and rescue activities (building collapse, etc.); and, has emergency medical services response capability.

Response time standards for the Anaheim Fire Department require first engine response within 5 minutes to 90 percent of all incidents and 8 minutes to the remaining 10 percent. In addition, the Department requires a maximum of 10 minutes for truck company response to 100 percent of all incidents. Based on the equipment and staffing listed in Table 5.8-1, Existing Fire Station, Locations, Equipment, and Staffing, current needs are being met (Wilder, pers. comm., 1995).

In addition to the emergency/medical services provided by the Anaheim Fire Department, the Anaheim Stadium Operations Division maintains onsite facilities, staffing, and equipment to provide first aid service during stadium events. There are two first aid facilities on the stadium property. The main first aid room is on the Anaheim Stadium field level by Gate Number 2 and the secondary first aid is on the conference level near the main entry. These facilities each maintain the following equipment: 3 wheelchairs; 3 O₂ units; 1 suction; 2 defibrillators; 1 woods lamp; 1 magnifying lamp, blood pressure cuff, and stethoscope; 2 otoscopes; 2 ophthalmoscopes and radios for communication; 3 mini-ambulance carts; 6 beds in the main room; 1 bed in the second room; and one stand by ambulance. In addition, there are currently 15 registered nurses assigned between the two first aid rooms during a scheduled event. However, this number may vary as staffing is based on attendance and the type of event scheduled.

Currently, the staffing and equipment resources available to the Anaheim Stadium Operations Division are adequate for most events. For some trade shows, another first aid site is needed. Currently, nurses use the usher captains room for these shows.

Fire Flow

According to the Anaheim Fire Department, the required fire flow for the project site is approximately 5,000 gallons per minute (gpm) with a minimal residual water pressure of 20 pounds per square inch (psi) to remain in the water system. The adequacy of the existing water system and fire flow availability for the project site is discussed in Section 5.8.6, Water Services.

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact to fire and emergency services if the project would result in a substantial need for fire and medical emergency assistance which can not be adequately met by available Fire Department personnel or equipment.

Impacts

Fire Prevention

With the proposed project, fire prevention services provided by the City of Anaheim Fire Department will be continued for the project site. The Anaheim Fire Department will continue to provide necessary fire prevention inspection, fire permit, hazardous materials disclosure, and underground storage tank services, particularly during future development project construction phases. In addition, complaints, trade shows inspections, hazardous materials spills, special event permits, investigations, and business license inspections are some of the other types of fire prevention activities that will continue.

Development of the Anaheim Sports Center would result in inspections and plan check services for the new construction. However, any additional inspector and/or plan checker time that may be required to service this increase would be covered by plan check fees; therefore, impacts to fire prevention services are not anticipated (Wilder, pers. comm., 1995).

Fire and Emergency Services

Development of the Anaheim Sports Center would generate additional development and is expected to result in an increase in the number of fire and medical service calls in the local area. However, the Anaheim Fire Department has indicated that the existing fire staff and equipment resources should be sufficient to adequately accommodate the increase in service calls generated by the proposed project (Wilder, pers. comm., 1995). In addition, consultation with the Anaheim Stadium Operations Division indicated that no impacts are anticipated on existing first aid resources on the stadium property. As first aid service is only provided during stadium events, an extension of service would be planned accordingly and its cost would be borne by event promoters.

Cumulative Impacts

The study area for cumulative fire and emergency/medical service impacts consists of the Anaheim Sports Center site and the service areas for Fire Stations 1, 3, and 7.

According to the City of Anaheim Fire Department, no significant impacts would occur on fire and emergency/medical services as a result of the project. Moreover, a major portion of the planned future development within the City will occur in the Anaheim Resort. Measures have been incorporated into the Anaheim Resort Specific Plan that would ensure, as this area is developed, adequate fire and emergency/medical services will be provided; therefore, no significant cumulative impacts are expected to occur related to fire and emergency/medical services.

Mitigation Measures

Mitigation Measure 8.1-1. Prior to approval of the Grading Plan, the property owner/developer shall submit an emergency fire access plan to the Fire Department for review and approval to ensure that service to the site is in accordance with Fire Department requirements.

Mitigation Measure 8.1-2. Where required, prior to the issuance of each building permit, plans shall indicate buildings which shall have sprinklers installed by the property owner/developer in accordance with the Anaheim Municipal Code. Said sprinklers shall be installed prior to each final building and zoning inspection.

Mitigation Measure 8.1-3. Prior to the issuance of each building permit, plans shall be submitted to ensure that development is in accordance with the City of Anaheim Fire Department Standards, including:

- a. Overhead clearance shall not be less than 14 feet for the full width of access roads.
- b. Bridges and underground structures to be used for Fire Department access shall be designed to support Fire Department vehicles weighing 75,000 pounds.
- c. All underground tunnels shall have sprinklers. Water supplies are required at all entrances. Standpipes shall also be provided when determined to be necessary by the Fire Department.
- d. Adequate fire hydrants shall be provided. The precise number, types, and locations of the hydrants shall be determined during building permit review. Hydrants are to be a maximum of 400 feet apart and designed to provide the required fire flow.

- e. Flow rates for public parking facilities (excluding open parking garages) shall be set at 1,000 to 1,500 gpm with a minimum pressure of 20 psi.

Mitigation Measure 8.1-4. Prior to commencement of structured framing onsite fire hydrants required shall be installed and charged by the property owner/developer, as required and approved by the Fire Department.

Mitigation Measure 8.1-5. Prior to issuance of each building permit, the property owner/developer shall submit a Construction Fire Protection Plan which shall include detailed design plans for accessibility of emergency fire equipment, fire hydrant location, and any other construction features required by the Fire Marshal. The property owner/developer shall be responsible for securing facilities acceptable to the Fire Department and hydrants shall be operational with required fire flow.

Mitigation Measure 8.1-6. Prior to approval of street improvement plans, the water supply system shall be designed by the property owner/developer to provide sufficient fire flow pressure and storage for the proposed land use and fire protection in accordance with Fire Department requirements.

Mitigation Measure 8.1.7. The property owner/developer shall provide for an additional first-aid station at the new stadium.

Significant Unavoidable Adverse Impacts

With implementation of the mitigation measures described above, no significant unavoidable adverse impacts on fire and emergency services are anticipated.

5.8.2 POLICE SERVICES

Environmental Conditions

Police services for the Anaheim Sports Center site are provided by the Anaheim Police Department located at 425 South Harbor Boulevard. In addition, helicopter operations are conducted from the Police Heliport located at 901 East Vermont Avenue. For police protection purposes, geographical areas of the City of Anaheim are divided into service areas of various sizes. The City of Anaheim is divided into five sectors, which are comprised of smaller units called Reporting Districts. The Anaheim Sports Center site is located within Sector 3 (see Exhibit 5.8-2).

Manpower and Equipment Resources

On a 24-hour basis, manpower available throughout the jurisdiction include 83 officers and 12 sergeants. Currently, manpower serving the project site include 18 officers and 4 sergeants. The equipment available to the stations responding to the project site include 22 patrol and community policing vehicles 2 accident investigation units, 6 motorcycles, 2 surveillance vans, 3 transportation vans, 3 helicopters, 4 K-9 Units, 1 SWAT van, 1 4X4 SWAT vehicle, and 4 primary response team vehicles. Currently, the Police Department is operating at a level of 1.29 officers per 1,000 population, which is below department goal of maintaining 1.5 officers per 1,000 population.

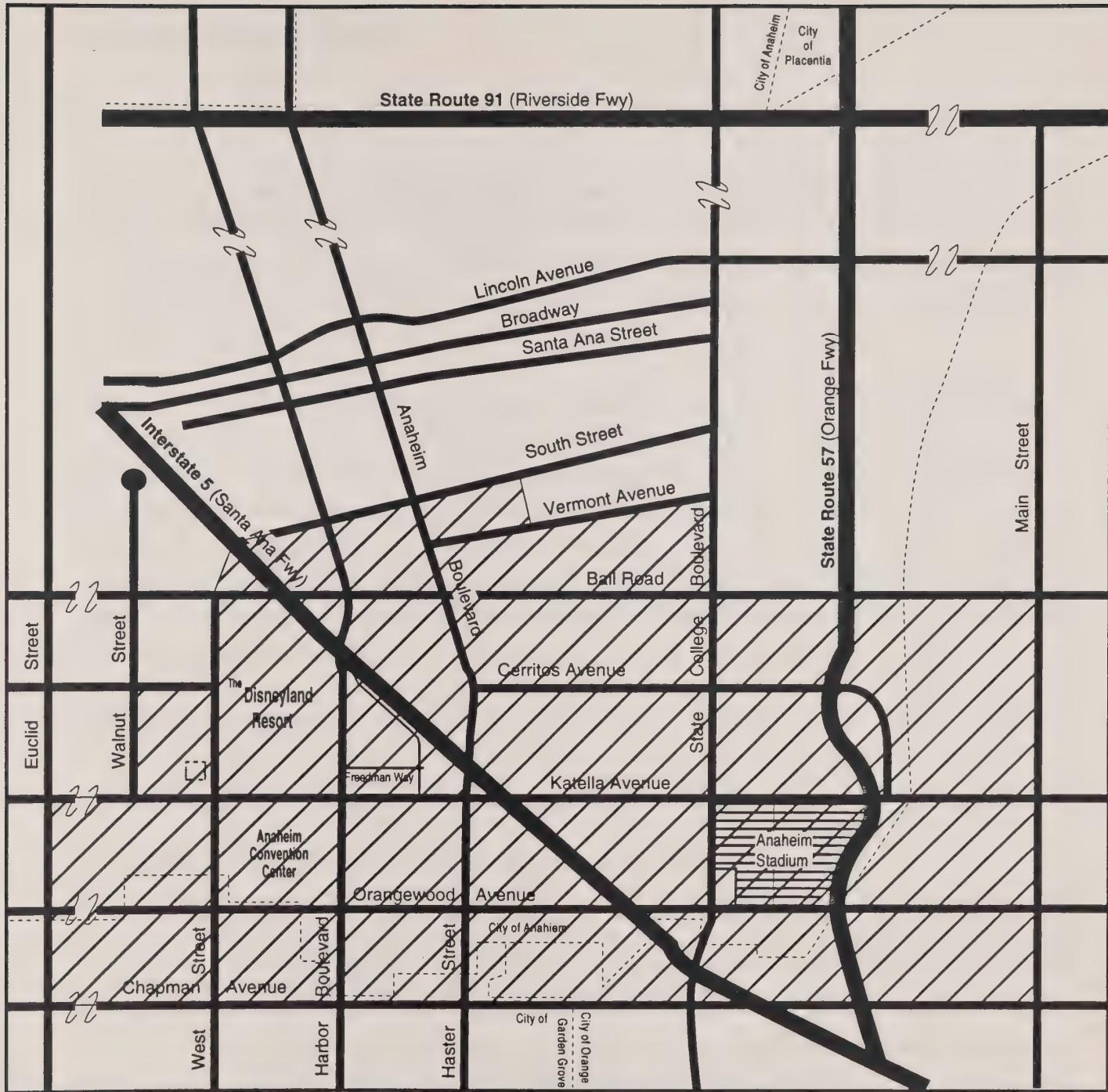
Response Statistics

In the first quarter of 1995, the approximate average response time of patrol units to emergency calls throughout the jurisdiction including the project site is an average of 10.4 minutes. This includes all Priority I calls - from the time the call is received until a unit is on the scene.

According to the Police Department, principal crimes reported throughout the jurisdiction include Part I crimes (consisting of homicide, rape, robbery, assault with a deadly weapon, burglary, larceny, vehicle theft, arson) and Part II crimes (consisting of all other crimes). In the past year (June 1, 1994 through May 31, 1995), 3,113 calls for service were received in Sector 3, representing approximately 2.4 percent of the calls for the entire City. The specific crimes reported in the project area over the past year include: theft, forgery, burglary, traffic accidents, assault with a deadly weapon, auto theft, malicious mischief, sexual battery, auto burglary, assault and battery, Anaheim Municipal Code violations, robbery, drunk in public, indecent exposure, under the influence of drugs/alcohol, disturbances, and fights.

Mutual Aid Agreement

The City of Anaheim has a Mutual Aid Agreement with the majority of the other cities in Orange County as well as the Orange County Sheriff's Department. This Inter-City Police Assistance Plan was adopted by the Orange County Chiefs of Police and Sheriff's Association on November 5, 1986. The plan provides for inter-agency assistance and cooperation during "local" police incidents. It comprises three different responses depending upon the nature of the assistance requested. One of the responses ("Code Alex") simply assigns observation posts; the remaining two responses ("Code Charlie" and "999") involve actual assignment of law enforcement personnel to a law enforcement problem.



LEGEND



Project Site



Sector 3



NORTH

NOT TO SCALE

Source: City of Anaheim Police Department, October 1995.

exhibit 5.8-2
Police Response Zone - Sector 3

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Security Services

Security services are provided at the Anaheim Stadium property by the Anaheim Stadium Operations Division. The security office is located on the field level at Gate Number 3. The security guards report to this office and are posted at various locations around the Stadium depending on the event. The approximate response time for security staff members to respond to calls throughout the stadium property is two to four minutes.

The security guards lock and unlock the Stadium, handle lost and found, check employee ID cards, operate the door access system, control access in tunnels to the stadium during events, patrol the stadium during non-event times, and work guard posts to secure various exhibitory shows overnight. Staff available include one guard during non events and two to ten guards during a stadium event. Equipment available includes an electric cart, pick-up truck for the parking lot, door access computer system, and a cellular phone and radio with direct contact with the Police Department. Currently, resources available to the Stadium Operations Division are adequate for maintaining a sufficient level of security services (Genovesi, pers. comm., 1995).

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact relative to police services if:

- Increases in development, population, size of events, or response times would require expanding the existing staff and equipment levels to maintain an adequate level of protection through the service area.
- A substantial amount of police emergencies would result that cannot be adequately served by available Police Department personnel or equipment.

Impacts

Development of the Anaheim Sports Center would result in indirect increases in the number of visitors and employees within the project site and surrounding area, thereby generating an increase in the level of service calls from the project site. These calls are anticipated to result from an increase in traffic on adjacent streets and arterials and an increase in transient occupancy which would require responses to thefts, vehicle burglaries, damage to vehicles, traffic-related incidents, and crimes against persons.

According to the Police Department, project implementation would impact the current staffing level of the Police Department, in both the traffic and patrol areas (Police Department's Traffic Bureau), particularly if there are same day events with the Anaheim Stadium and Anaheim Pond. Therefore, the Police Department has identified the need for additional staffing to accommodate the estimated increase in service calls: 32 police officers assigned as "extra duty" at the new stadium during events (includes 2 assigned to the security office); \$40,000/year for overtime to use traffic officers on an "as needed" basis for traffic control; and 6 part-time positions assigned for special events.

However, as the scheduling of stadium events within the Anaheim Sports Center site would allow only one stadium event to occur at any given time, the number of stadium visitors to a Anaheim Sports Center event (whether it be in the existing Anaheim Stadium, the new stadium or proposed youth stadium) would not be a substantial increase from the number of visitors to existing stadium events. However, with the development of the associated use onsite, the number of people on the project site overall and would create an incremental increase in the need for police services. It is proposed that any additional staffing that may be required of the Police Department, due to development of the proposed project, would be primarily for those activities that occur offsite (traffic violations, etc.) and could be funded through tax proceeds associated with anticipated incremental growth within the Anaheim Sports Center site. Although the Police Department would be required to respond to the site for major incidents (crimes against a person, etc.) the Anaheim Stadium Operations Department has indicated that additional security, which would act as the primary security for the project, would be hired as necessary to patrol the Sports Center site. Therefore, impacts to police services resulting from project implementation would be limited and considered less than significant.

According to the City of Anaheim Police Department, no significant impacts would occur on police protection services as a result of the project. Moreover, a majority of the future development within the City will occur in the Anaheim Resort Specific Plan area. Measures have been incorporated into this project that would ensure as this area is developed, adequate police protection services will be provided; therefore, no significant cumulative impacts are expected to occur related to police protection services

Cumulative Impacts

The study area for cumulative police protection service impacts consists of the Anaheim Sports Centers site and the remainder of Sector 3.

According to the City of Anaheim Police Department, no significant impacts would occur on police protection services as a result of the project. Measures have been incorporated into this project that would ensure as this area is developed, adequate police protection services will be provided; therefore, no significant cumulative impacts are expected to occur related to police protection services.

Mitigation Measures

Mitigation Measure 8.2-1: Prior to the approval of the final site plan and issuance of each building permit, the property owner/developer shall submit plans to the Police Department for review and approval for the purpose of incorporating safety measures in the project design including the concept of crime prevention through environmental design (i.e., building design, circulation, site planning, and lighting of parking structure and parking areas).

Mitigation Measure 8.2-2: Prior to the issuance of each building permit for a parking structure, the property owner/developer shall submit plans to the Police Department for review and approval indicating the provision of closed circuit monitoring and recording or other substitute security measures as may be approved by the Police Department. Said measures shall be implemented prior to final building and zoning inspections.

Mitigation Measure 8.2-3: Ongoing during project operation, the property owner/developer shall provide private security on the premises to maintain adequate security for the entire project subject to review and approval of the Police Department. The use of security patrols and electronic security devices (i.e., video monitors) shall be considered to reduce the potential for criminal activity in the area.

Mitigation Measure 8.2-4: Prior to the issuance of each building permit, the property owner/developer shall submit design plans that shall include parking lots and parking structures with controlled access points to limit ingress and egress if determined to be necessary by the Police Department, and shall be subject to the reviews and approval of the Police Department.

Significant Unavoidable Adverse Impacts

With implementation of the mitigation measures described above, no significant unavoidable adverse impacts on police services are anticipated.

5.8.3 SOLID WASTE DISPOSAL SERVICE

Environmental Conditions

Regional Setting

The City of Anaheim Department of Maintenance recently developed a Solid Waste Management Plan to comply with the California Integrated Waste Management Act of 1989 (Cal. Health and Safety Code 40000). This law requires cities and counties within California to reduce waste generation by a minimum of 25 percent by 1995 and 50 percent by the year 2000 through a combination of solid waste management, source reduction, recycling, composting, and market development. Collection and recycling programs are currently underway in the residential areas of the City and are proposed for commercial areas in the future. "Recycle Anaheim" is a program administered by Anaheim Disposal, Incorporated and has been implemented on a mandatory basis for single-family residences only. Commercial/retail and industrial uses also participate in this program on a voluntary basis.

All of the solid waste generated in Anaheim is currently disposed of at the Olinda/Olinda-Alpha Landfill, located in unincorporated Orange County and within the City of Brea's Sphere of Influence. The landfill is permitted to receive 8,000 tons of solid waste per day excluding asphalt or soil (Grogan, pers. comm., 1995). In 1987, the Orange County Board of Supervisors authorized a two-phase process to identify sites for additional Class III (nonhazardous) solid waste disposal capacity and future integrated waste management facilities for north Orange County. The Phase I NOCLATS report was completed in 1989. This study involved the identification and comparative evaluation of 16 candidate landfill sites in north Orange County and four alternative waste management technologies. Information presented in the Phase I report resulted in the selection by the Board of Supervisors of four primary sites and two alternative technologies which were assessed in the EIR prepared for the NOCLATS report. On March 10, 1992, the Orange County Board of Supervisors certified the Final EIR for the North Orange County Landfill and Alternative Technologies Study (NOCLATS) project and approved the expansion of the Olinda/Olinda-Alpha Landfill. This landfill site is projected to remain in operation until the year 2013.

Local Setting

Solid waste generated by existing uses within the Anaheim Sports Center site is collected and disposed of by Anaheim Disposal, Incorporated, which serves the City of Anaheim. Approximately 1,501 tons of solid waste is currently generated annually from existing uses on the project site (Anaheim Stadium,

commercial and office/professional uses). This is equivalent to approximately 4.1 tons of solid waste per day, which represents approximately 0.05 percent of the daily permitted capacity at the Olinda/Olinda-Alpha landfill (Anaheim Stadium Operations, June 1995).

TABLE 5.8-2
PROJECTED MAXIMUM INCREASE IN SOLID WASTE GENERATION

Component	Area	Load (lbs/sf/yr or lbs/seat/yr)	Solid Waste Generation (tons/year)
<u>Proposed Uses</u>			
Urban Entertainment/Retail	750,000 sf	1.8	675
Office Uses	900,000 sf	2.2	990
Hotel No. 1 (350 rooms)	385,000 sf	1.2	231
Hotel No. 2 (150 rooms)	165,000 sf	1.2	99
Youth Sports Center	750 seats	40	15
<u>Existing Uses to be Removed</u>			
Commercial-Office/Professional	55,140 sf	2.2 sf/yr	-61
Total Project Net Increase			1,949
lbs = pounds sf = square feet yr = year			
Source: Michael Brandman Associates, January 1996.			

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact on solid waste facilities (i.e., landfills) if the existing facilities do not have adequate capacity for the increase in solid waste, or if the disposal of project-related solid waste would result in a reduction in the planned lifespan of a landfill.

Impacts

Construction of the future development projects within the Anaheim Sports Center site will involve site preparation activities and demolition, which will generate waste materials. Hauling and disposal of these materials will occur during the construction process of individual development projects located within the Sports Center site.

Following completion and occupancy of the development projects within the Sports Center site, refuse will be regularly generated. As indicated in Table 5.8-2, project implementation would generate an estimated 1,949 tons of solid waste annually, or a net increase of approximately 5.3 tons per day, which constitutes approximately 0.06 percent of the current daily permitted capacity of the expanded Olinda/Olinda-Alpha Landfill.

The waste generated by the proposed project would represent a small percentage of the remaining capacity at the expanded Olinda/Olinda Alpha Landfill. Implementation of the City's Solid Waste Management Plan and mitigation measures included herein will help extend the life of landfills and substantially reduce the impact of future development projects within the Anaheim Sports Center site. Solid waste will be collected and disposed of by Anaheim Disposal Incorporated, or other contractors designated by the City, at the appropriate landfill sites.

Cumulative Impacts

The study area for cumulative impacts to solid waste is the service area of the Olinda/Olinda-Alpha Landfill.

Based on generation factors for specific land use types (e.g., office, retail, hotel., etc.), the related projects will generate an estimated 13,099 tons of solid waste annually (approximately 36 tons per day). The proposed Anaheim Sports Center plus related projects, identified in Table 4-1, will cumulatively generate approximately 15,048 tons of solid waste per year (approximately 41 tons per day). The aggregate amount will represent approximately 0.5 percent of the current daily permitted capacity at the Olinda/Olinda-Alpha landfill. This would represent a significant cumulative impact on solid waste disposal in the Olinda/Olinda-Alpha service area.

While the quantity of solid waste produced is expected to be a significant impact on the current landfill system, the City of Anaheim has completed Solid Waste Management Plan, which will reduce solid waste by 50 percent by the year 2000. It is anticipated that the implementation of such plans

throughout the region will extend the life of local landfills. It can reasonably be assumed that all related projects, as well as the Anaheim Sports Center, will be required to execute programs designed to limit the amount of solid waste sent to the landfill, thus reducing the level of any cumulative impacts; however, the cumulative impacts will still be significant.

Mitigation Measures

Mitigation Measure 8.3-1. Prior to issuance of each building permit, the property owner/developer shall submit project plans to the Maintenance Department for review and approval to ensure that the plans comply with AB 939, the Solid Waste Reduction Act of 1989, the County of Orange and City of Anaheim Integrated Waste Management Plans as administered by the City of Anaheim. Prior to final building and grading inspections, implementation of said plan shall commence and shall remain in full effect as required by the Maintenance Department.

In order to meet the requirements of the Solid Waste Reduction Act of 1989 (AB 939), the property owner/developer shall implement numerous solid-waste reduction programs, as required by the Maintenance Department, including but not limited to:

- Detailing the locations and design of onsite recycling facilities.
- Providing onsite recycling receptacles to encourage recycling.
- Participating in the City of Anaheim's "Recycle Anaheim" program or other substitute program as may be developed by the City.
- Facilitating paper recycling by providing chutes or convenient locations for sorting and recycling bins.
- Facilitating cardboard recycling (especially in retail areas) by providing adequate space and centralized locations for collection and bailing.
- Facilitating glass recycling (especially from restaurants) by providing adequate space for sorting and storing.
- Providing trash compactors for nonrecyclable materials whenever feasible to reduce the total volume of solid waste and the number of trips required for collection.
- Providing on-site recycling receptacles accessible to the public to encourage recycling for all businesses, employees, and patrons where feasible.
- Prohibiting curbside pick-up.

- Ensuring hazardous materials disposal complies with federal, state, and city regulations.

Mitigation Measure 8.3-2. On-going during project operations, the following practices shall be implemented, as feasible, by the property owner/developer:

- Usage of recycled paper products for stationery, letterhead, and packaging.
- Recovery of materials such as aluminum and cardboard.
- Collection of office paper for recycling.
- Collection of polystyrene (foam) cups for recycling.
- Collection of glass, plastics, kitchen grease, laser printer toner cartridges, oil, batteries, and scrap metal for recycling or recovery.

Mitigation Measure 8.3-3. Prior to issuance of a demolition permit, the property owner/developer shall submit a Demolition and Import/Export Plans, if determined to be necessary by the Public Works/Engineering Department, Traffic Engineering Division and/or Maintenance Department. The plans shall include identification of offsite locations for material export from the project and options for disposal of excess material. These options may include recycling of materials onsite, sale to a broker or contractor, sale to a project in the vicinity or transport to an environmentally cleared landfill, with attempts made to move it within Orange County. The property owner/developer shall offer recyclable building materials, such as asphalt or concrete for sale or removal by private firms or public agencies for use in construction of other projects, if all cannot be reused on the project site.

Significant Unavoidable Adverse Impacts

Implementation of the mitigation measures is anticipated to substantially reduce the amount of solid waste produced by the project; however, because of the limited landfill capacity, the impact to landfill capacity is expected to remain significant.

5.8.4 PARKS

Section 5.1, Land Use and Related Planning Programs, provides a discussion of the project's compliance with the Parks, Recreation, and Community Services Element goals and policies set forth in the Anaheim General Plan.

Environmental Conditions

Park and recreational uses are maintained by the Anaheim Parks, Recreation, and Community Services Department (the "Department"). Currently, there are no park facilities to serve the Anaheim Sports Center site; therefore, visitors and workers presently go outside the project area to utilize parks. According to the City, this results in a taking of park area away from the residential users (Mayer, pers. comm., 1995).

The department has identified Boysen Park, a 23.5 acre community park, approximately 1.5 miles north from the Anaheim Sports Center site, as the nearest park. Boysen Park includes a nonlighted softball field, a lighted softball/soccer field, a lighted baseball/soccer field, a nonlighted soccer field, 2 play equipment areas, volleyball courts, picnic facilities, restrooms, landscaping, and parking. In addition, a concessionaire operated tennis facility with 12 tennis courts and several practice walls are also available onsite Boysen Park.

The City recently adopted the Parks, Recreation, and Community Service Element of the City's General Plan (GPA 325) which identifies park acreage and facility deficiencies. The City attempts to maintain a ratio of 2 acres of parkland per 1,000 population. Based upon this standard, the population in the year 1994 (290,915 persons) generated a demand for 581.8 acres of parkland. The estimated parkland demand in the year 2010 (based upon 370,456 persons) is 605.4 acres. Currently, the City of Anaheim has a total of 521 acres of developed local parkland (Mayer, pers. comm., 1995). Therefore, there is a current parkland deficit of 60.8 acres. This deficit is projected to increase to 84.4 acres by the year 2010 (Anaheim Parks, Recreation, and Community Service Element, 1992). Additionally, the demand for the use of ballfields is greater than the availability at peak usage periods.

Currently, there are no programmed expansion plans for parks and recreational facilities within the project area.

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact on park facilities if existing facilities are not adequate to serve proposed land uses.

Impacts

Since development of the Anaheim Sports Center does not involve the construction of new dwelling units, no direct increases in population for the City of Anaheim would result. Therefore, project implementation would not result in any direct impacts on park, recreation, and community facilities as there are no park requirements associated with the project.

According to the department, project implementation would indirectly impact parks nearby the Anaheim Sports Center site by users visiting the project area. This would likely occur before or after the venue being visited or by hotel visitors in the area. Employees of the commercial facilities in the project area may also contribute to the demand.

A substantial area within the Anaheim Sports Center site has been designed, in a park-like setting, to encourage use by pedestrians. The Youth Sports Center, picnic facilities, orchard parking, and walking trails proposed within the Sports Center site would serve as recreational uses. In addition, the design plan of the Anaheim Sports Center site includes pedestrian amenities such as landscaped walkways, street furniture, and lighting which would promote a recreational theme as designed will increase recreational opportunities.

This project does not create a significant impact because there are many passive recreational facilities provided within the Sports Center site which would accommodate the increase in demand.

Cumulative Impacts

The cumulative study area for the assessment of park impacts is the City of Anaheim.

Parks are developed in the City of Anaheim on an as-needed basis. An existing deficiency in parkland has been identified by the City. There is no housing units proposed in connection with related projects which will directly generate additional demand for park sites. Additional housing and employment population resulting from employment associated with the nonresidential related projects is anticipated. Most of the related projects are located within West Anaheim, an area considered by the City to be deficient in park facilities. Therefore, development of the related projects will result in a significant cumulative impact on parks; however, the proposed project does not contribute to the existing parkland deficiency and, therefore, will not contribute to impacts from other projects.

Mitigation Measures

As there will be no negative impact to parks created by approval of the proposed project, no mitigation measures are required.

Significant Unavoidable Adverse Impacts

No significant adverse impact on park and recreational resources is anticipated from implementation of the proposed project.

5.8.5 SCHOOLS

The school impact analysis was based on enrollment and capacity data provided by the Anaheim Union High School District and the Anaheim City School District; the schools analysis in The Disneyland Resort Specific Plan EIR; and the Anaheim Resort Specific Plan EIR. The City also has reviewed and analyzed additional information provided by the school districts for this, as well as previous projects, including:

1. The "Anaheim Union High School District Comprehensive Study of the Impact of Development on the School Districts and Fee Program Justification" (February 4, 1994) prepared by Recht, Haurath & Associates (RH&A), required as a condition to collection of statutory developer fees.
2. The "Comprehensive Study of the Impact of Development on the School Districts and Fee Program Justification," March 1992, prepared by Recht, Haurath & Associates (RH&A).
3. The "Critique of The Disneyland Resort Specific Plan Draft Environmental Impact Report and Analysis of Impact on Anaheim City School District."
4. "Development Fee Justification Analysis for Residential Development, Commercial/Industrial Development and Senior Housing" prepared for the Anaheim City School District, April 1993, and prepared by School Planning Services.

Where applicable, the information contained in this section of the report reflects information based on the final analysis presented in The Anaheim Resort Specific Plan Final EIR, July 1994 and The Disneyland Resort Specific Plan EIR, June 1993. Additionally, the information incorporated from the technical report(s) referenced above has been updated, verified and/or validated to reflect existing

1994/95 conditions. As such, the analysis, tables and exhibits that follow represent the most current data available during the preparation of this EIR.

The DEIR does not explicitly discuss the project's impacts on any school district other than the Anaheim City School District (ACSD) and Anaheim Union High School District (AUHSD) because:

1. There is no potential for direct project impacts because the project does not include any new residential development. Additionally, each school district may restrict the number of inter-district transfers (employees who enroll their children near their place of employment) to conform with available student seating capacity.
2. Under applicable state law, any potential indirect impacts that may occur as a result of project-generated employees relocating to new housing units within other school districts would be mitigated through the imposition of developer fees on construction of such new housing units.
3. Estimates of indirect impacts of project-generated employees who relocate to existing housing units within other school districts are speculative at best and, therefore, cannot be reasonably analyzed in this EIR.
4. Based on the estimated distribution of project-generated employee households throughout the study area, as described in this analysis, and the size and location of the school district, it is reasonable to predict that the impact of project-generated employee households relocating to within the boundaries of the district will be negligible. However, this issue is addressed in this section.
5. Each school district outside the ACSD and AUHSD area will receive school fees from any new residential units that may be constructed within that district's boundaries.

However, correspondence was sent to five surrounding school districts to obtain existing information regarding school conditions (capacity, fee structure, school sites, etc.) to assist in determining the potential impacts the proposed project could have on these school districts. No responses have been received from any school district except AUHSD and ACSD.

The methodology used to calculate the potential impacts of the proposed project on the enrollment and capacities of these two school districts is explained in this section of the EIR. After a thorough evaluation, the City of Anaheim has determined that the analysis presented in this section of the EIR is a reasonable analysis which is substantiated by realistic assumptions and methodology. Cumulative impacts related to schools are also addressed in this section of the EIR.

Environmental Conditions

The project area is located within the jurisdictions of the Anaheim Union High School District and the Anaheim City School District.

The Anaheim Union High School District (AUHSD) provides grades 7-12 and adult education for much of the cities of Anaheim, Buena Park, and Cypress, portions of the cities of La Palma, Stanton, Garden Grove, Fullerton, Los Alamitos, and Orange, as well as various areas of unincorporated Orange County. AUHSD operates eight junior high schools, eight high schools, three continuation high schools, and a special education school. The cities of Anaheim, Buena Park, and Cypress are roughly approximate AUHSD boundaries.

Kindergarten through 6th grade students in the vicinity of the project area are served by the Anaheim City School District. The Anaheim City School District (ACSD) encompasses an area within, but not coterminous with, the City of Anaheim. ACSD has 21 kindergarten through 6th grade elementary schools. The City of Anaheim's boundaries roughly approximate the boundary of the ACSD for the purposes of analysis of impacts because the district encompasses all of the City of Anaheim and only small portions of the cities of Orange and Garden Grove.

Anaheim Union High School District

Current Enrollment

According to California Basic Education Data System (CBEDS) information provided by the district for the preparation of this EIR, the total enrollment in October 1994 (1994-95 school year) in 7th-12th grades in AUHSD was 22,305 students (Best, Best & Krieger, May 1995). This is an 11 percent reduction from the enrollment in the 1992/93 school year when enrollment was 24,770 students. Of this number, 8,559 are junior high students enrolled in grades 7-8 (a 7 percent increase from the 1992-93 year enrollment of 8,001), and 13,746 are senior high students in grades 9-12 (a 9 percent reduction from the 1992-93 year enrollment of 15,069). AUHSD continuation schools, special education programs, alternative education, and independent study programs account for additional students. The project is located within the Katella High School-South Junior High School attendance area and also borders on the Loara High School-Ball Junior High School attendance area to the west and the Anaheim High School-Sycamore Junior High School attendance area to the north. For the purpose of this EIR analysis, the district provided the 1994-95 enrollment and the estimated 1995-96 enrollment projections for the AUHSD schools which serve the project area shown in Table 5.8-3.

AUHSD has an "open enrollment" policy allowing students to choose his or her school of attendance. For that reason, the schools are addressed as a whole for the district.

TABLE 5.8-3
ESTIMATED ENROLLMENT IN GRADE 7-12 SCHOOLS
IN THE PROJECT VICINITY
(1992-93 SCHOOL YEAR)

School Complex	Projected Enrollment		
	1994-95	1995-96	1996-97
Senior High	13,746	14,109	13,722
Junior High	8,559	8,736	8,746
Total	22,305	22,845	22,468

Source: AUHSD 1993 and 1995.

Student Generation Rates

According to the Comprehensive Study of the Impact of Development and Fee Justification (Recht Hausrath & Associates, March 1992), the AUHSD student generation rate is 0.204 students per dwelling unit in grades 7-12.

Future AUHSD Enrollment

Based on the AUHSD's projected enrollment over the next 2 years, enrollment is projected to differ less than 2 percent, remaining relatively stable over that time period.

AUHSD Classroom Seating Capacity

AUHSD seating capacity is an estimate of the amount of classroom space available to house students based on a loading factor of 27 students per classroom. This is based on the District's standard of 31.5 with adjustments for teacher preparation time and physical education classes (Recht Hausrath & Associates 1994).

All AUHSD schools currently operate on a single-track, two-semester, or "traditional" school year schedule. Assuming a single-track, two-semester capacity, there are 16,210 senior high school seats (grades 9-12) and 9,588 junior high school seats (grades 7-8), for a total of 25,798 seats in the AUHSD as a whole (not including the continuation high schools, the special education school, or administrative rooms within individual schools). These capacity figures differ from those provided by the AUHSD; which states 15,123 student capacity for 9-12 and 9,265 for 7-8 grades. The larger capacity numbers are substantiated by the Recht Haurath & Associates report sent to the City by AUHSD.

Relationship of AUHSD Enrollment and Capacity

For the junior high-senior high campuses closest to the project site, the 1994-95 school year enrollment-capacity situation is illustrated in Table 5.8-4, Enrollment vs. Capacity at AUHSD Schools. Overall, these schools are currently operating at about 86 percent of capacity. A comparison between projected junior high and senior high enrollment "demand" and the above "supply" estimate of single-track seating capacity is shown in Table 5.8-5, Future Enrollment vs. Capacity, Anaheim Union High School District.

Projections of junior high school enrollment indicate that by 2010-2011, there will still be an excess capacity, but it will have minimally increased from 1,029 to 1,264 seats available, as shown in Table 5.8-5, Future Enrollment Capacity, AUHSD. However, if the standard district capacity of 31.5 students per classroom is used rather than 28 (Recht Haurath & Associates 1994), the total capacity would increase to 10,786, leaving an excess in capacity of 2,227 for the 1994-1995 school year and 1,446 in 2010-2011.

At the senior high school level, projections for 2010-2011 indicate that there will be a lack of capacity by 2,804 seats. Using the standard district capacity of 31.5 students per classroom rather than 27 (Recht Haurath & Associates 1994), the total capacity of the 1994-1995 school year would have been 18,911 students, increasing capacity by 2,701 students. In this case AUHSD will be short by about 1,291 seats to accommodate projected future growth and will have to operate one or more schools on a year-round basis, add portable classrooms, and/or construct new space.

TABLE 5.8-4
ENROLLMENT VS. CAPACITY IN THE AUHSD SCHOOLS

School	Enrollment ^a	Capacity ^b	Difference
Senior High			
Anaheim	2,024	2,416	392
Cypress	1,681	2,129	448
Katella	1,759	1,903	144
Kennedy	1,762	2,355	593
Loara	1,878	2,185	307
Magnolia	1,564	1,697	133
Savanna	1,616	1,808	192
Western	1,462	1,717	255
Subtotal	13,746	16,210	2,464 (+18%)
Junior High			
Ball	1,112	1,260	148
Brookhurst	927	1,161	234
Dale	1,132	1,225	93
Lexington	967	1,150	183
Orangeview	944	1,140	196
South	1,173	1,097	(76)
Sycamore	1,275	1,294	19
Walker	1,029	1,261	232
Subtotal	8,559	9,588	1,029 (+12%)
Total	22,305	25,798	3,493 (14%)

^a 1994/95 school year.
^b Based on factor of 27 students per room and two rooms per school allocated for teacher work, and not included in capacity number.

Source: Recht Hausrath & Associates 1994; AUHSD 1995, Best, Best & Krieger 1995.

TABLE 5.8-5
FUTURE ENROLLMENT VS. CAPACITY^a
ANAHEIM UNION HIGH SCHOOL DISTRICT

	1994-95	2010-2011
Capacity		
Junior High	9,588	10,604
Senior High	<u>16,210</u>	<u>16,104</u>
Total	25,798	26,708
Enrollment		
Junior High	8,559	9,340
Senior High	<u>13,746</u>	<u>20,172</u>
Total	22,305	29,512
Surplus/(Deficit)		
Junior High	1,029	1,264
Senior High	<u>2,464</u>	<u>(4,068)</u>
Total	3,493	(2,804)

^a Based on single-track seating capacity figures calculated with the use of 28 students per classroom for junior high school and 27 students for senior high.

Source: AUSD 1995, Recht Haurath & Associates 1994,
Michael Brandman Associates 1995.

Anaheim City School District

Current Enrollment

For the purpose of this EIR analysis, the district provided 1994-95 enrollment figures for the schools located within the Anaheim City School District (ACSD). During the 1994-95 school year, there were 17,561 students enrolled in ACSD schools (including special education students). The enrollment situation at the District schools is summarized in Table 5.8-6, Current Enrollment at ACSD Schools.

Fourteen ACSD schools currently operate year-round on a four track "60-20" program. Under a "60-20" plan, the school year is divided into three 60-day instructional periods and three 20-day vacation periods. Each pupil thus has 3 months of instruction followed by 1 month of vacation. With a four-track, 60-20 plan like that used in ACSD schools, building seating capacity is increased by 33 percent.

TABLE 5.8-6
**CURRENT ENROLLMENT AT ANAHEIM CITY SCHOOL DISTRICT
SCHOOLS IN THE PROJECT VICINITY, 1994-95**

School	Current Enrollment
Barton	765
Edison YRE ^a	974
Franklin YRE	850
Gauer YRE	748
Guinn	736
Henry YRE	869
Jefferson YRE	827
Juarez	847
Key YRE	634
Lincoln	944
Loara	697
Madison	611
Mann YRE	847
Marshall YRE	1,008
Palm Lane YRE	868
Price YRE	1,098
Revere YRE	998
Roosevelt	668
Ross YRE	646
Stoddard YRE	1,037
Sunkist YRE	889
Total	17,561

^a Year round enrollment.

Source: ACSD Current Monthly Enrollment Summary, May 19, 1995.

Student Generation Rate

The student generation factor used in the District's Developer Fee Justification Study was prepared using a commonly accepted estimation technique. The study has been officially adopted by the district and it was independently verified by the preparers of the EIR Schools Analysis.

While it is true that district boundaries do not exactly match the census tract boundaries used by the district's consultant in making the student generation factor calculation for the Fee Justification Study, the district and the City have determined that the census tract boundaries serve as a reasonable proxy for the district.

Although ACSD previously prepared an estimate of the number of 1991-92 dwelling units within the districts' boundaries, the district does not have more recent estimates available for use in this EIR (see Table 5.8-7). Thus, the dwelling unit estimate used in this analysis was obtained by the City of Anaheim from the California Department of Finance, Orange County Population and Projections, January 1, 1995. The estimated number of dwelling units in 1995 is 92,483. In addition, this analysis relies on the Orange County Projections (OCP-92), prepared by the Environmental Management Agency in 1992. The estimated number of building permits issued between 1990 and the first quarter of 1994 is substantially fewer than the OCP-92 estimates for the year 2000. Subtracting the difference between the average of 325 units per year and the factual numbers of residential building permits issued between 1990 and 1994, the OCP-92 year 2000 estimate would be reduced by approximately 808 units. Additionally, approximately 4 percent of the building permits issued during this period did not complete construction. This equates to an additional reduction of 32 units or a total of 840 units less than projected for the year 2000. It has been estimated by the City that through the year 2000, housing growth within the City of Anaheim will be less than that projected by OCEMA. Thus, the OCP-92 estimate of 53,959 dwelling units may be too high when compared to actual building activity. OCP-92 is anticipated to be revised in 1996 at which time housing and employment estimates are most likely to be reduced to reflect conditions associated with the lingering recession.

For the years 2000 and 2010, ACSD used two projection methods - SPS 1 which is based on the continuation of the number of housing units constructed from 1980-1990 and SPS 2 which is based on the continuation of the rate of housing growth from 1980-1990. SPS 1 yielded 322 units/year which is almost identical to OCP-92 in the long-term. SPS 2 yielded 372 units/year which accounts for the higher range in projections for the years 2000 and 2010. By using the timeframe between 1980-1990, the projections by ACSD are relatively high since that timeframe was considered a "boom" period for both Anaheim and Southern California. As demonstrated by actual residential

building permit numbers, the housing growth of the first four years of the nineties are substantially lower than the housing growth that occurred in the eighties. Assuming that Anaheim recovers from the recession in the near-term, growth is not anticipated to approach the building activity of the late eighties.

TABLE 5.8-7
ESTIMATED NUMBER OF DWELLING UNITS WITHIN
ACSD SCHOOL DISTRICT BOUNDARIES

Dwelling Units	Year 1991-92	Year 1992-93	Year 2000	Year 2010
ACSD Estimate	51,780	n/a	53,657-55,853	56,877-72,173
OCP-92	n/a	52,090	54,767	57,970

Source: ACSD 1993, City of Anaheim 1995.

Given the comparisons between the districts' projections and OCP-92, as noted above, the City of Anaheim determined that the OCP-92 projections more accurately reflect the estimate of the number of new dwelling units anticipated to be constructed within the district's boundaries by the year 2010. As such, OCP-92 estimates were used in this analysis to determine the overall student generation rate.

Dividing ACSD's 1992-93 total enrollment by OCP-92's estimate of 52,090 housing units located within the district in 1992-93 yields an overall student generation rate of 0.313 student per household, as shown in Table 5.8-8, Estimated Student Generation Rates for the Anaheim City School District (1992-93).

Table 5.8-8 demonstrates that the projected generation rate is projected to decrease very slightly, but should remain fairly constant; therefore, in order to be conservative, 0.313 has been used as the current and projected student generation rate in this analysis.

In addition to the projection of students based on projected households in the district, ACSD has a formula for projecting students based on employees as follows in Table 5.8-9, Student Generation Rate Per Employee.

TABLE 5.8-8
ESTIMATED STUDENT GENERATION RATES FOR THE
ANAHEIM CITY SCHOOL DISTRICT
(1992-93 AND 2000-01 SCHOOL YEARS)

	Total (Grades K-6)		2000-01
	1992-93	2000-01	
Enrollment	16,304	17,561	17,561
Occupied Dwelling Units	52,090 ^a	53,959 ^b	54,755 ^a
Student Generation Rate ^c	0.313	0.307	0.311

^a ACSD projections.
^b OCP-92 projections.
^c Total K-6 enrollment divided by occupied dwelling units.

Source: ACSD 1993, City of Anaheim 1994.

TABLE 5.8-9
ESTIMATED STUDENT GENERATION RATES FOR
THE ANAHEIM CITY SCHOOL DISTRICT

Job Type	Generation Rate (per employee)
Retail	0.24
Office	0.33
Hotel/Motel	0.97
Research and Development	0.33
Warehouse	0.27
Industrial	0.34

Source: ACSD 1995.

Future ACSD Enrollment

Based on ACSD's projected enrollment over the next 5 years, enrollment (24,327) is projected to increase by approximately 38 percent (6,766), substantially increasing over this time period.

Another method for projecting future enrollment is to multiply the projected increase in households within the ACSD boundaries by the most current student generation rate of which is from 1992-1993. This produces the future enrollment estimates for the years 2000 and 2010 in Table 5.8-10. Future ACSD Enrollment Based on 1992-93 Student Generation Rates.

As part of this method, ACSD uses a "cohort enrollment model" which projects year-by-year, grade level-by-grade level enrollment generated by existing housing and projected new housing between the 1992-93 and 2010-2011 school years. Based on this method, the school district yields approximately 1,000 more students in 1995-96 than ACSD's current state-approved 5-year projection. Based on an estimate of 4,450 new housing units by the year 2000 and 9,420 new units by 2010 and other assumptions on birth rate trends and special education enrollment (as described in Appendix J, Volume 5, The Disneyland Resort EIR, November 1992), it is estimated that enrollment, under this methodology, will reach 24,006 by the year 2000 and 21,708 by 2010. However, projections provided to MBA in July 1995 from ACSD suggest that enrollment will be 24,327 by the year 2000 and 33,718 by 2010.

TABLE 5.8-10
FUTURE ACSD ENROLLMENT BASED ON
1992-93 STUDENT GENERATION RATES

Year	Total Housing Units	Student Generation Rate	Estimated Enrollment
1992-1993	52,090	0.313	16,304
2000-2001*	54,767	0.313	17,142
2010-2011	57,970	0.313	18,145

* The 1993 Facilities Master Plan for ACSD indicates a 5 percent vacancy rate in the ACSD boundary whereas the Anaheim Department of Finance (DOF) showed the entire City of Anaheim at 6.14 percent vacancy rate for 1993 which increased to 6.2 percent in 1995 based on California Department of Finance projections. Applying the California DOF vacancy factor to the number of dwelling units would reduce the number of students generated by 1.2 percent since the population would be less than projected by ACSD.

Source: ACSD, City of Anaheim 1994.

ACSD Classroom Seating Capacity

ACSD seating capacity, or the amount of classroom space available to house students, is determined by first classifying each teacher "work station" in each ACSD school by type (e.g., kindergarten or general classroom) and by grade level. Each classroom type is then multiplied by state pupil "loading" standards, expressed in terms of Average Daily Attendance (ADA) per teaching station. ADA is equal to 97 percent of actual enrollment to account for the fact that some students are absent from school each day of the school year. Since this is a formula used by the state to determine eligibility for capacity expansion (e.g., new schools), the ADA standards are fixed on a statewide basis and do not necessarily conform with maximum class sizes as reflected in local school district policies and classroom teacher agreements. Each individual school's seating capacity is the sum of these calculations for each respective teacher work station.

The 30-student loading standard used for general classrooms is an average for the State Department of Education pupil loading of 29 students per class for grades 1-3 and 33 students per class for grades 4-6. These classroom loading standards are consistent with the maximum standards permitted by the State Department of Education. Applying the appropriate state "loading" factors, as described above, to the number of classrooms reported in 1994 by ACSD for each school in the district provides an estimate of 19,275 seating capacity in the ACSD.

However, based on ACSD's Current Monthly Enrollment Summary of May 1995, it was estimated that the district has a seating capacity of 13,851. This capacity, although quite lower than the figure obtained using state "loading" factors, does assume an increase capacity of 25 percent from 14 of the 21 schools operating within the district.

Relationship of ACSD Enrollment and Capacity

With a seating capacity of 19,275 in the ACSD, there should be additional classroom space warranted through 2010, based on the total number of housing units projects and the student generation rate of 0.313.

Comparing enrollment as projected by ACSD to the estimate of seating capacity indicates that by the year 2000, the district will have a 4,700 seat shortage. By the year 2010 it is anticipated that enrollment growth will slow; at this time the deficit will decrease to about a 2,400 seat shortage.

ACSD projections estimate that year 2000-2001 enrollment, 22,401 students will come from existing development and 1,605 will come from post-1992 housing. If the ACSD projection is correct, there will not be seating capacity by the year 2000 to accommodate the 1,605 students projected by the district to be generated by post-1992 development. These students could be housed in about 40 portable or newly constructed classrooms if they were operated on a "60-20" plan year-round calendar. If it is assumed that new classrooms are added at the same ratio of multi-track, year-round use to traditional calendar use was projected by the district, the 1,605 seats associated with new development would require 2.25 new schools.

Assuming that 67 percent (i.e., the ratio of 14 year-round schools to 21 total ACSD schools) of a standard 600-student elementary school operates year round with a capacity factor of 1.33 and 33 percent operates on a single-track basis, a 600-student school could accommodate 732 students. This estimating approach is consistent with the Fee Program Justification Report, except that it uses a 1.33 factor for year-round capacity, whereas the ACSD Report uses 1.25. By adding a 3-month segment, capacity increases by 33 percent.

In the school year 2010-2011, ACSD projects that 18,636 students will be generated by existing development and 3,072 by new development. Assuming that there are no permanent expansions in seating capacity beyond the 1995 situation, there will be 1,089 seats which could be filled by students from new development, leaving an unsatisfied need for 1,983 seats from new development by the year 2010. This requirement could be met with 50 portables, all operated on a "60-20" plan calendar. If, on the other hand, the same year-round/traditional calendar mix in newly constructed space which was noted above is assumed, 2.78 schools would be needed. It is important to remind the reader that this future need is based upon ACSD projections which were modeled using the housing boom years of the 1980s, which are no longer occurring. If all schools operate on a "60-20" plan, there would be an additional 2,050 seats, leaving a surplus of 67 seats in 2010.

ACSD Inter-district Transfers

As previously discussed, a school district may consider applications for inter-district transfers from parents who reside outside the district if the parent or guardian is employed within the boundaries of the district. The inter-district transfer program in the ACSD applies to students in all grades from kindergarten through the 8th grade.

According to an ACSD representative, the district turns down four incoming transfer applications for every one it accepts, primarily because of space limitations. There has been a declining number of

in-coming ACSD inter-district transfers and a fairly stable number of out-going transfers. In each year the number of out-going transfers has exceeded in-coming transfers. These relationships are shown in Table 5.8-11.

TABLE 5.8-11
INTER-DISTRICT TRANSFERS TO AND FROM
THE ANAHEIM CITY SCHOOL DISTRICT (1987-88 TO 1990-91)

Year	Transfers In	Transfers Out	Net Change
1987-88	158	297	-139
1988-89	108	238	-130
1989-90	112	286	-174
1990-91	62	243	-181

Source: Disneyland Resort EIR, Appendix J, 1993. (Update not available)

It is possible that some children of employees at the existing Anaheim Stadium attend ACSD schools through the inter-district transfer program. However, the exact number of such students cannot be determined because the district considers the records of employment confidential. In any case, the number of such students would not constitute a significant proportion of the total ACSD enrollment since it would be some fraction of the total number of transfer students.

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact on educational services and facilities if project-related school development fees are not adequate to compensate for direct or indirect induced student generation beyond the projected capacity of the school district.

Impacts

Anaheim Union High School District

Direct Impacts

Since implementation of the project does not involve the construction of new dwelling units, it will not have direct impacts on the AUHSD in terms of directly generating new students. Concerning inter-district transfers in the 7th and 8th grades, there is no evidence that there is a significant demand among the current employees of the Anaheim Stadium or uses in the northwest corner of the site for such transfers, and there is no reason to believe there will be any greater demand among the employees generated by future development projects within the Anaheim Sports Center site. In any event, a decision about whether to permit such inter-district transfers is entirely within the control of the AUHSD. Should capacity problems emerge in the future, it is anticipated that permission for any project-related inter-district transfers would be denied because of lack of school capacity. No significant direct impacts are anticipated to occur.

Indirect Impacts

The methodology for assessing potential indirect impacts is based on the methodology assumptions prepared for The Disneyland Resort EIR, as noted in Section 3.10.5.1 and incorporated by reference herein. It is estimated that implementation of the plan could produce a need for 479 dwelling units within the boundaries of the AUHSD by 2010 (see Section 5.7, Employment, Population, and Housing).

The area of Anaheim, Buena Park, and Cypress is larger than the AUHSD boundaries, even though small portions of other cities, which are in the AUHSD boundaries, are not included.

Applying the AUHSD student generation rates previously described to the number of units implied by the housing demand analysis indicates that the project could generate, 98 AUHSD students (0.204 per household x 479 project-related dwelling units = 98 AUHSD students).

Anaheim City School District

Direct Impacts

Since implementation of the project does not involve the construction of new dwelling units, no direct generation of new students will take place. Parents of K-6 students who reside outside the ACSD but want to enroll their children in district schools may have a direct impact. This assumes that the current state legislation on such inter-district transfers is extended beyond its sunset date in 1995, to coincide with the two projection periods of the Anaheim Resort Specific Plan area (i.e., 2000 and 2010). There is no evidence of a significant demand by existing Anaheim Stadium employees for inter-district transfers into the ACSD, and there is no evidence to demonstrate a change in this situation for the project-generated employees. Permission for inter-district transfers for children of specific development project employees could be denied by the ACSD because of lack of space, preventing a project impact. Implementation of the proposed project would not result in a significant direct impact to ACSD.

Indirect Impacts

A reasonable estimate of indirect school enrollment impacts can be determined from the project's estimated indirect demand for housing in the City of Anaheim. Additional information on the project's indirect demand for housing is provided in Section 5.7, Employment, Population, and Housing. It shows an estimated total need for 479 units for all household income categories in the area of the Anaheim City School District by 2010.

Applying the ACSD student generation rates discussed previously, to the number of housing units implied by project housing demand in Anaheim, indicates that implementation of the project could generate 150 ACSD students by 2010 ($0.313 \text{ per household} \times 479 \text{ project-related dwelling units} = 150 \text{ ACSD students}$).

Statutory Developer Fee for ACSD and AUHSD

Under state law (California Government Code Section 53080 et seq.), a fee will be collected from the developer of future developments within the Anaheim Sports Center. A specific project's fee is based on applicable floor area for commercial structures multiplied by \$0.28 per square foot, as adjusted according to state law. The impact fees will be evenly divided by the ACSD and AUHSD. With a total of approximately 2.2 million square feet of new commercial, retail, and office development at

the Anaheim Sports Center, the Anaheim Sports Center would generate approximately \$616,000 in school fees.

To the extent that implementation of the Anaheim Sports Center generates households occupying new housing units in the ACSD and AUHSD, the developers of those units will also pay a statutory fee to the districts to mitigate school impacts. Thus, the districts will collect fees both from the future developments within the Anaheim Resort Specific Plan area and from builders of new homes into which project employee households may move. The housing fee paid to the ACSD and AUHSD is based on an average unit size of 1,364 square feet (per the ACSD Fee Program Justification Report) and the current maximum statutory fee of \$1.72 per square foot. Assuming the new employees generate the need for new development within the AUHSD and ACSD boundaries, the residences are subject to a school fee, the 479 new units would generate a total of approximately \$1.124 million ($\$1.72 \times 479 \times 1,364$).

With the \$616,000 in school fees from development of Anaheim Sports Center and \$1.124 million in fees from projected new residential development, a total of approximately \$1.74 million in school impact fees would be generated by project implementation. The actual fees paid will be commensurate with the amount of development which occurs onsite and from residential development in the districts. The estimated cost of impacts to schools based on indirect impacts of \$9,874 per new student at AUHSD and \$10,478 at ACSD is based on the Hamilton, Rabinovitz & Alschuler, Inc. school impact assessment of The Disneyland Resort EIR, Volume 5, Appendix J. The 98 potential AUHSD students and 150 ACSD students would generate a cost impact of up to \$2.5 million (\$0.968 million and \$1.5 million respectively). With developer fees from the project and new residential development totaling up to \$1.74 million, a shortfall of approximately \$780,000 in fees for new student incurred costs would result from project implementation resulting in a significant impact to schools due to the shortfall of funding. However, if more year-round schools are developed, there may not be a need to increase capacity through additional development and, therefore, the fees will be adequate to avoid impacts.

Cumulative Impacts

The study area for cumulative assessment of school impacts is comprised of the district boundaries of the Anaheim City School District (ACSD) and the Anaheim Union High School District (AUHSD).

Infill housing and higher densities in existing housing are expected to take place within the study area, including development of related projects within the study area. This would generate additional

students at AUHSD and ACSD. The related projects do not include any housing units. The nonresidential related projects would indirectly generate new students. However, because of the absence of detailed data on the characteristics of the labor force associated with the nonresidential related projects, it is not possible to predict the possible secondary impacts of the related projects with any degree of precision. There are no residential developments in the related projects list (Section 4.0). However, each new project requiring discretionary approval will be subject to individual environmental review by the City, including, where applicable, impacts on school facilities. The development fee for the Districts (\$1.72 per square foot on residential development and \$0.28 per square foot on commercial industrial development currently) will be collected for each new development, where appropriate.

It is unknown how many residential units will be constructed within the ACSD and AUHSD by the year 2010. It is assumed that development of the Anaheim Sports Center may induce residential growth within the City, but the amount is unknown. For this reason, it must be concluded that impacts to schools will be significant. Imposition of developer fees, in accordance with state law, will mitigate potential impacts to level considered less than significant by state law.

Mitigation Measures

Mitigation Measure 8.5-1: Prior to issuance of each building permit, the property owner/developer shall provide proof to the Building Division of the Planning Department that school impact fees have been paid consistent with State statutes.

Significant Unavoidable Adverse Impacts

The proposed project will not have any direct impacts on the AUHSD or ACSD. The recommended mitigation measure imposes the maximum developer fee imposed by the state. However, the potential cost created by the new students generated by anticipated residential units within the AUHSD and ACSD will not be fully mitigated by the developer fees if additional year-round schools are not developed, and if enrollment increases as projected. Project development may indirectly result in the development of housing units which will create significant impacts to the School Districts.

5.8.6 WATER

This section addresses the water distribution system serving the Sports Center site. Section 5.6, Hydrology and Water Quality, discusses the potential impacts of the project on available water supply.

An analysis of the effects of the project and related projects on water service was prepared as part of the *Anaheim Sports Center - Public Services and Utilities Technical Report* prepared IWA Engineering, November 1995. The report has been summarized in this section and included in its entirety as Appendix B.

Environmental Conditions

Regional Setting

Water service is provided to the Anaheim Sports Center site by the City of Anaheim Public Utilities Department, Water Division. The majority of the City's water (approximately 70 percent) is pumped from the local groundwater basin. Local groundwater is supplied through storm water infiltration and recharge basins. As back-up for the wells, additional water is purchased from the Metropolitan Water District (MWD), the state water wholesaler for Southern California.

MWD is a wholesale water agency responsible for providing supplemental water (water from a source other than local groundwater and surface water) to water agencies within its service area. MWD contracts for this water from the State Water Project (SWP) and the Colorado River. As a wholesale agency, MWD finances, constructs, and operates the pipelines and other facilities to transport the state water from its source to the wholesaler's area of service. Water purveyors, such as the City of Anaheim Public Utilities Department, Water Division, contract with MWD for imported water. Purveyors transport the water from the wholesale agency's storage facility or from turnouts (connection points) on the wholesaler's distribution pipeline and provide water service to their clients.

Local Setting

Of the domestic water used in north Orange County, 70 percent is currently derived from the groundwater basin managed by Orange County Water District (OCWD). OCWD prepared a Groundwater Management Plan (GWMP) in 1994 which defines goals to increase basin water supplies, protect and enhance water quality, and improve basin management for purposes of increasing reliance on local sources rather than on less dependable imported water.

In addition, OCWD and County Sanitation District of Orange County (CSDOC) are jointly evaluating the Orange County Regional Water Reclamation Project (OCR Project) to develop a reclaimed water supply for northern Orange County. This project, while producing reclaimed water will be fulfilling its primary directive to recharge groundwater at OCWD's existing recharge facilities in the City of

Anaheim. It is expected that the OCR Project will produce 50,000 acre-feet per year by the year 2000 and an additional 25,000 acre-feet per year by the years 2010 and 2020 for 75,000 and 100,000 cubic-feet per year, respectively. The proposed pipeline alignment is along the Santa Ana River Channel and will extend from the OCWD/CSDOC facilities in Fountain Valley to the OCWD Recharge facilities in Anaheim.

Well No. 33, which is on and serves the Anaheim Sports Center site, was drilled and has been operating for the last 30 years at the intersection of Stadium Way and Stadium Center Drive. The well produces an average of 1,080 gallons per minute and is 469 feet deep. A connection to the MWD system near the intersection of Cerritos Avenue and Lewis Street provides back-up service for the well.

Well No. 33, the existing MWD connections, and the distribution lines are capable of supplying the existing maximum day demands and peak hour demands to the Anaheim Sports Center site. However, new wells will be necessary in the future in order to compensate for diminishing production from older wells serving the area.

The Anaheim Sports Center site is bounded by water mains in Orangewood Avenue, State College Boulevard and Katella Avenue as identified in Exhibit 5.8-3, Existing Water System. The distribution lines are as follows: 12" in Katella Avenue, 12" in State College Boulevard and lines ranging from 6" to 12" in Orangewood Avenue. The existing Anaheim Stadium is serviced by all three of these service lines in a looped system. These service lines are supplied with water by Well No. 33. Well No. 33 is located on the Anaheim Stadium property. Additionally, the Anaheim Sports Center site is included in the City of Anaheim Five Year Water System Plan.

In 1992, the City of Anaheim adopted Ordinance No. 5349, entitled the Landscape Water Efficiency Ordinance, to reduce and conserve landscape-related water consumption. The purpose of this ordinance is to "promote efficient water use through landscape design appropriate to Anaheim's climate zone." The ordinance applies to all new and rehabilitated public, industrial, commercial, and institutional landscaping and developer-installed landscaped common areas in single-family and multi-family residential land uses. As such, the documentation and monitoring requirements of the Landscape Water Efficiency Ordinance would apply to landscaping proposed within the Anaheim Sports Center site.

Environmental Impacts**Thresholds of Significance**

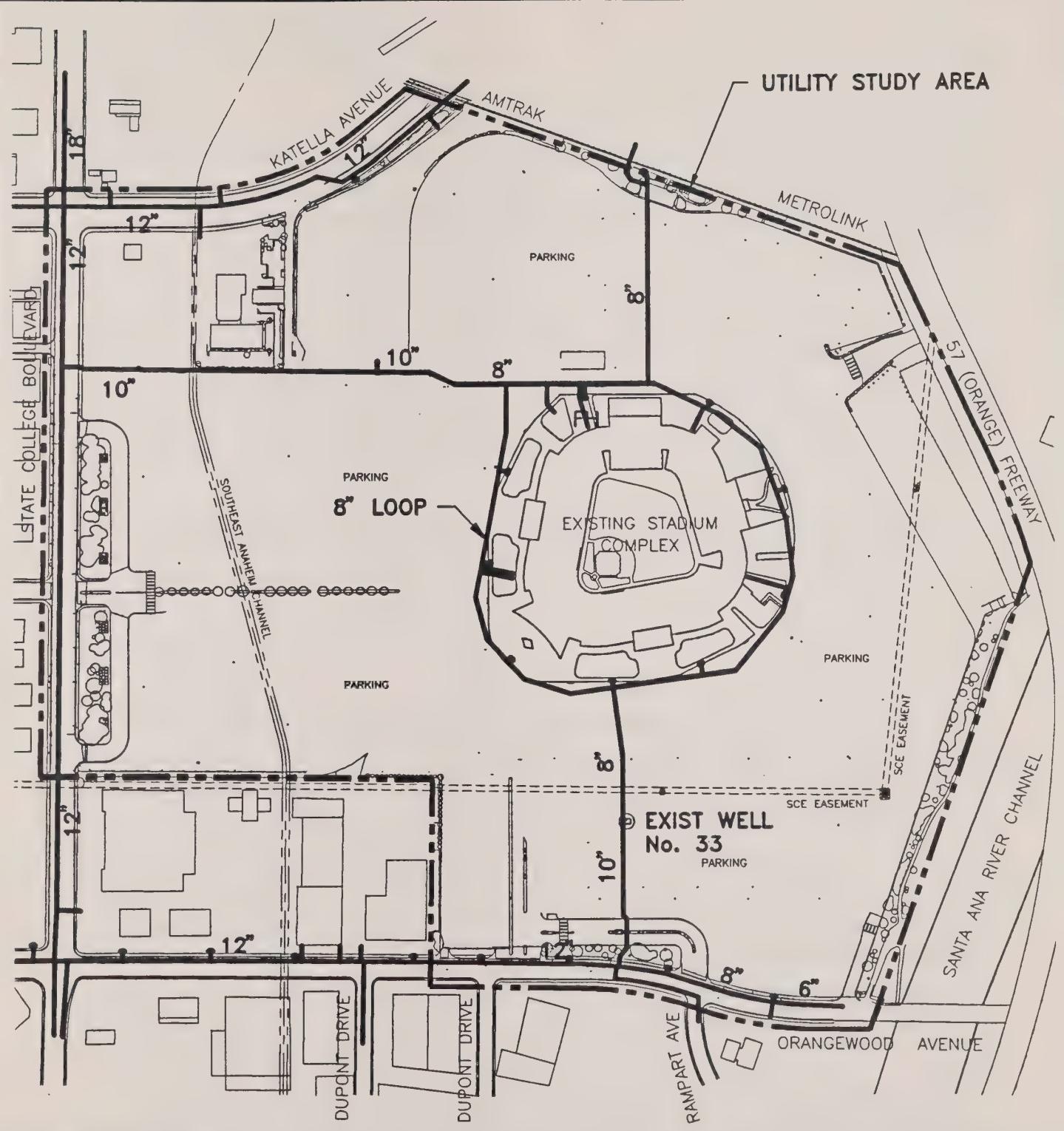
A project is considered to have a significant impact on water services if existing or future planned facilities are not adequate to serve proposed land uses.

Project Consumption: Average Daily/Peak Demand

Project implementation would result in an increase in water consumption from domestic demands and landscape irrigation. Specifically, a large portion of the site is currently a parking lot and will be converted to landscaped areas including a grass parking lot, new stadium field, and a variety of new landscaped medians throughout the site. As identified in Table 5.8-12 the projected maximum increase per day in domestic water demand for the site will be 0.665 million gallons per day (mgd).

TABLE 5.8-12
PROJECTED MAXIMUM INCREASE IN WATER DEMAND

Component	Area	Consumption Rate (gpd/ksf or gpd/seat)	Water Demand (mgd)
Proposed Uses			
Stadium (70,500)			0.170 ^a
Entertainment/Retail	750,000 sf	80	0.060
Office Uses	900,000 sf	240	0.216
Hotel No. 1 (350 rooms)	385,000 sf	180	0.063
Hotel No. 2 (150 rooms)	165,000 sf	180	0.027
Youth Sports Center	750 seats	4	0.003
Landscaping Irrigation	731,808 sf	178	0.130
Existing Uses to be Removed			
Commercial-Office/Professional	55,140	80	-0.004
Total Project Net Increase			0.665
gpd = gallons per day ksf = thousand square feet mgd = million gallons per day sf = square feet/square foot			
* This is the additional water demand by a new 70,500-seat stadium compared to the existing 70,500-seat stadium assuming additional fixtures as planned.			
Source: IWA Engineers, January 1996.			



Source: IWA Engineers, July 1995.

LEGEND



Project Boundary



Existing Water Line



NORTH

550' 275' 0' 550'



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19870001 • 1/96

exhibit 5.8-3
Existing Water System

ANAHEIM SPORTS CENTER EIR

Project implementation would result in impacts to Well No. 33, existing MWD connections, and distribution lines. A new well will be necessary in order to compensate for diminishing production from older wells serving this zone and to assist in meeting increased fire flow requirements. In addition, improvements to the conveyance infrastructure in the Anaheim Sports Center area will be necessary.

The peak domestic demands for each facility will not occur at the same time. The peak hours for the land uses assumed are as follows: between 9 a.m. and 10 a.m. for hotels, between 10 a.m. and 11 a.m. for commercial office buildings, between 2 p.m. and 3 p.m. for retail, and between 8 p.m. and 10 p.m. for the existing Anaheim stadium. However, in order to evaluate the proposed pipe system in the project area, the domestic flows were combined and considered to peak simultaneously.

In addition, as the stadium is not considered a common use because peak usage is approximately 3 hours per venue, a peaking factor as it relates to water demand was not applied to this use since its usage is a peak in itself.

Fire Flow

The adequacy of fire protection for a given area is based on required fire flow, response distance from existing fire stations, and the City of Anaheim Fire Department's judgment of needs in an area. Required fire flow is closely related to land use. The quantity of water necessary for fire protection varies with the type of construction, life hazard, occupancy, and the degree of fire hazard. According to the Anaheim Water Division, improvements to the water system in this area will not be required as the system presently can provide 6,000 gpm for the 2-hour fire incident at 20 psi. For buildings with sprinkler systems the requirement is 4,000 gpm. Fire flows have not been considered in the water demand calculations. Because fire flow demands are intermittent and variable, it is standard industry practice not to consider fire flow in demand calculations. In evaluating the water system, the City will add the fire flow demand to the maximum day demand to determine the pipe sizes.

A new well (No. 45) will be necessary in order to compensate for diminishing production from older wells serving this zone. Improvements to the conveyance infrastructure in the area of the proposed project will also be necessary to serve the proposed project. The well is expected to produce in the vicinity of 3,000 gallons per minute and be approximately 1,400 feet deep.

As required for other major projects in the City, the project will include dual piping onsite to utilize reclaimed water (Exhibit 5.8-4) when it is available from the County Sanitation District of Orange

County (CSDOC). Subsequently, particular piping systems in the surrounding streets will be upgraded from this development. Additionally, development of the proposed project will require project specific improvements and inclusion of previously contemplated City improvements. These improvements are identified in the City of Anaheim Five Year Water System Plan and include: an onsite 16 inch and 12 inch domestic water line looping system to join with the existing water lines in Orangewood Avenue, State College Boulevard, and Katella Avenue; and a separate reclaimed water system to be installed parallel to the proposed domestic water system which consists of lines ranging from 6 to 12 inches. It should be noted that upon implementation of the proposed project, approximately 8.88 mgd of capacity would remain in onsite waterlines at 20 psi.

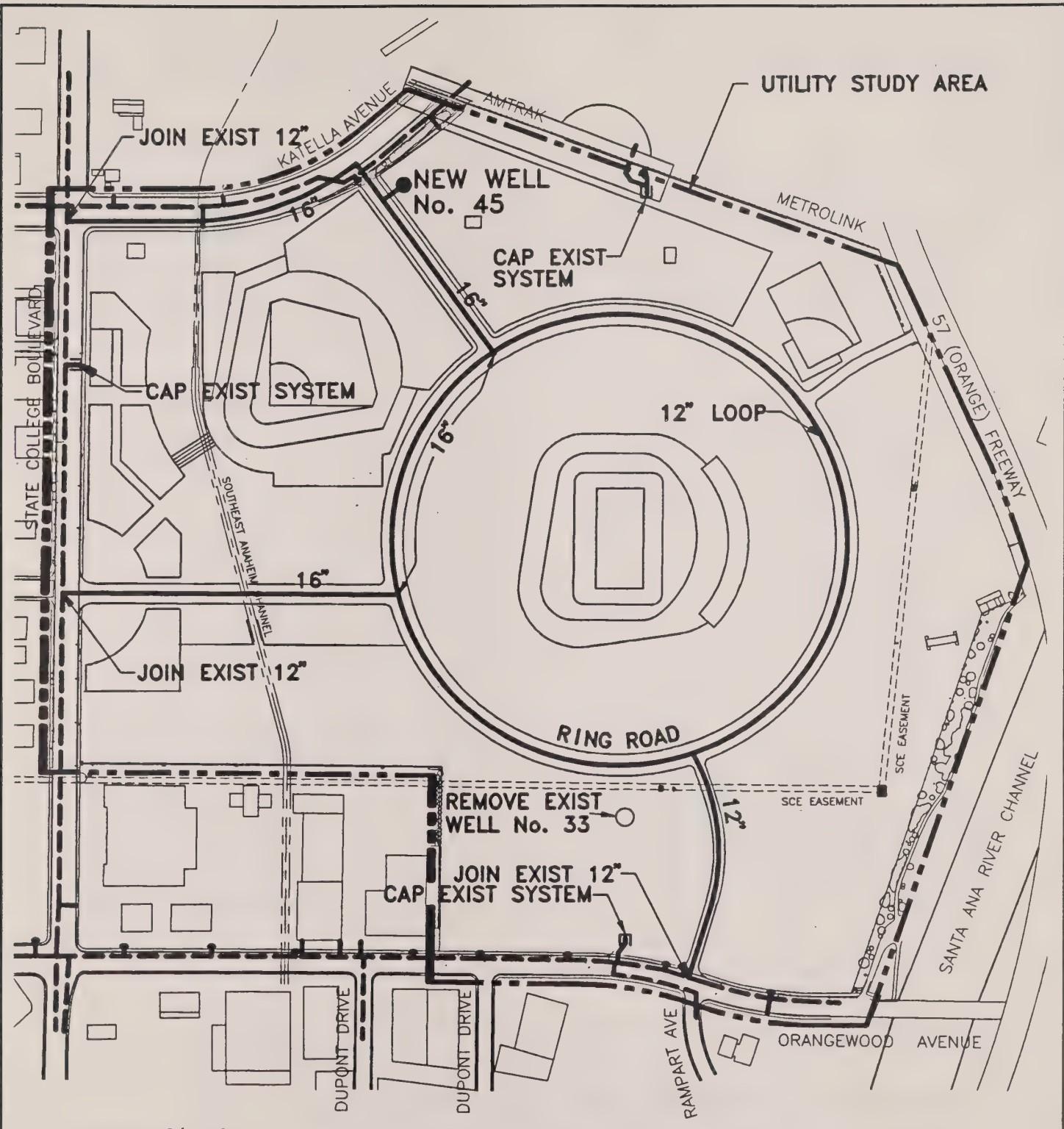
No significant impacts to water services are anticipated with the development of the proposed facilities improvements.

Cumulative Impacts

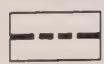
The relevant study area is defined to encompass the water distribution system located east of I-5 that is within the 335-zone (static HGL) pressure zone. Most, if not all, of the related projects sites are located within this pressure zone.

Projected water demand for the proposed project is estimated at 0.665 million gallons per day (mgd). The projected water demand for the related projects was estimated based on the demand factors for the size and use of projects. The average daily water demand for the related projects is estimated at 1.91 mgd. Based on this methodology, it is estimated that the cumulative average water demand of the related projects plus the Anaheim Sports Center will be approximately 2.57 mgd. A discussion of water availability from OCWD is presented in Section 5.6, Hydrology and Water Quality and Section 5.8, Public Services, Utilities, and Energy Consumption.

The proposed improvements to the water distribution system that are listed as mitigation measures in Section 5.8, Public Services, Utilities, and Energy Consumption, were designed to accommodate the total increase in water demand from the proposed project and reasonably foreseeable growth in the immediate area, including the related projects that are part of the water service area. In calculating the necessary improvements, the City of Anaheim based its analysis on its 5-year Capital Water System Plan for the area. Therefore, with the implementation of the proposed improvements and with developments paying their fair share, potential cumulative effects on water service would be reduced to a less than significant level. Mitigation measures will be required to ensure service is maintained at an adequate level with buildup of the project and related projects, with the property owner/developer paying a fair share of the required improvement costs.



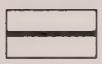
LEGEND



Project Boundary



Existing Water Line



Proposed Water Line



550' 275' 0' 550'



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exhibit 5.8-4
Proposed Water System

ANAHEIM SPORTS CENTER EIR

Mitigation Measures

Mitigation Measure 8.6-1. Prior to final building permit, a new Well No.45 will be installed. This well will serve as a major source of supply for the proposed project. This new well will be installed near the intersection of Katella Avenue and the Anaheim Sports Center. The implementation of this well shall be timed to coincide with the level of development onsite that would require this improvement, to the satisfaction of the City Engineer.

Mitigation Measure 8.6-2. A new 16 inch pipeline will be constructed by the property owner/developer in Katella Avenue from Well No. 45 to the exiting 18 inch line at the intersection of Katella Avenue and State College Boulevard. An additional offsite 16-inch pipeline will be constructed to replace a portion of the exiting 12-inch pipeline along State College Boulevard. This new pipeline in State College Boulevard will extend from Gene Autry Way to the existing connection in Katella Avenue. These new pipelines shall be constructed in conjunction with project development to complete a loop with the sites proposed and the surrounding system. The implementation of this pipeline shall be timed to coincide with the level of development onsite that would require this improvement, to the satisfaction of the City Engineer.

Mitigation Measure 8.6-3: Water conservation will be an important part of proposed project and it will be achieved through numerous measures intended to reduce water consumption. The City of Anaheim adopted the Landscape Water Efficiency Guidelines with certain voluntary and mandatory landscape requirements. This ordinance is in compliance with the State of California Water Conservation in Landscaping Act (AB 325). Among the measures to be implemented with the proposed project area are the following:

- Use of water-conserving landscape plant materials wherever feasible.
- Use of vacuums and other equipment to reduce the use of water for wash down of exterior areas.
- Low-flow fittings, fixtures and equipment including low flush toilets and urinals.
- Use of self-closing valves for drinking fountains.
- Use of efficient irrigation systems such as drip irrigation and automatic systems which use moisture sensors.
- Infrared sensors on sinks, toilets and urinals.

- Low-flow shower heads in hotels.
- Infrared sensors on drinking fountains.
- Use of irrigation systems primarily at night, when evaporation rates are lowest.
- Water-efficient ice machines, dishwashers, clothes washers, and other water using appliances.
- Cooling tower recirculating system.
- Use of low flow sprinkler heads in irrigation system.
- Use of waterway re-circulation systems.
- Provide information to the public in conspicuous places regarding water conservation.
- Use of reclaimed water for irrigation and washdown when it becomes available.

In connection with submittal of landscape and building plans, the applicant shall identify which of these measures have been incorporated into the plans.

Mitigation Measure 8.6-5. Prior to issuance of the first building permit the applicant shall enter into an agreement with the City of Anaheim to pay all water fees associated with the project.

Significant Unavoidable Adverse Impacts

Implementation of the mitigation measures listed above will reduce the impact on the water supply system to a level considered less than significant.

5.8.7 WASTEWATER

Environmental Conditions

Regional Setting

The City of Anaheim local sanitary sewer system serves the project vicinity, which is a tributary to the County Sanitation District of Orange County (CSDOC). The CSDOC consists of nine subdistricts that encompass 439 square miles. Wastewater from the City sewer system is conveyed to the trunk

and interceptor sewers to regional treatment and disposal facilities. The CSDOC interceptor sanitary sewer serving the Anaheim area flows west, through Garden Grove, to the District's Treatment Plant No. 1 in Fountain Valley. Plant Number 1 has a total capacity of 60 million gallons per day (mgd). The Fountain Valley plant, along with Treatment Plant Number 2 in Huntington Beach, treats wastewater from 24 Orange County cities and unincorporated County areas. Together, the treatment plants process more than 270 mgd of wastewater.

Approximately 80 percent of the total effluent is generated by residential uses. The balance comes from industrial or commercial sources. Treated effluent is discharged into the Pacific Ocean. Future CSDOC expansion plans involve the construction of three upstream water reclamation plants with a capacity of 43 mgd and development of a water reclamation system for irrigation in the Anaheim area. The CSDOC also plans to expand Plant Number 1 in Fountain Valley to process 120 mgd of wastewater.

The CSDOC currently reclaims up to 15 mgd of secondary treatment water from the Fountain Valley Plant which is purified at the Orange County Water District Factory 21. The purified water is injected into the groundwater table to block seawater intrusion. The CSDOC has proposed plans to reclaim an additional 15 mgd for industrial use and landscape irrigation.

Local Setting

The Anaheim Sports Center site is currently served by the CSDOC Newhope-Placentia 42 inch trunk sewer in State College Boulevard, the CSDOC Orangewood Diversion 48 inch sewer main in Orangewood Avenue and the CSDOC Santa Ana River Interceptor 78 inch sewer trunk below the Santa Ana River (see Exhibit 5.8-5).

The westerly portion of the project site conveys flows via a 15 inch line which discharges into the 42 inch Newhope-Placentia Trunk in Katella Avenue. This 15 inch line contains a siphon to convey flows under the Southeast Anaheim Channel Facility E12 (SACF E12). The SACF E12 is a 11 feet by 9-foot concrete box which conveys storm water from areas north of the site. The current flows in this line are calculated at 0.226 mgd (million gallons per day), 0.350 cubic feet per second and 157 gallons per minute.

The Newhope-Placentia Trunk flows southerly towards Orangewood Avenue where some of the flow is diverted into the Orangewood Diversion Sewer. According to the CSDOC 1989 Trunk System Deficiencies Plan the Newhope-Placentia Trunk is deficient downstream of the Anaheim Sports Center

site in conveying existing flows. The Orangewood Diversion Sewer was built in 1991 to alleviate this deficiency.

The 48 inch Orangewood Diversion Sewer flows easterly and is located in Orangewood Avenue between State College Boulevard and the Santa Ana River. The Orangewood Diversion Sewer conveys a portion of the flow from the Newhope-Placentia Trunk to the Santa Ana River Interceptor. According to discussions with the CSDOC the Orangewood Diversion Sewer is currently operating below capacity and in conjunction with the Newhope-Placentia Trunk there is sufficient capacity to accommodate flows from the Anaheim Sports Center site.

The easterly section of the project site uses a 12-inch sewer line to convey flows to the 78 inch Santa Ana River Interceptor (SARI). There is no existing data on the current available capacity in this line. It is assumed that this sewer line was designed to operate at 50 percent of its full capacity. The SARI flows southerly and is located underneath the Santa Ana River Flood Control Channel. According to discussions with the CSDOC the SARI is currently operating below capacity and has sufficient capacity to accommodate flows from the Anaheim Sports Center site.

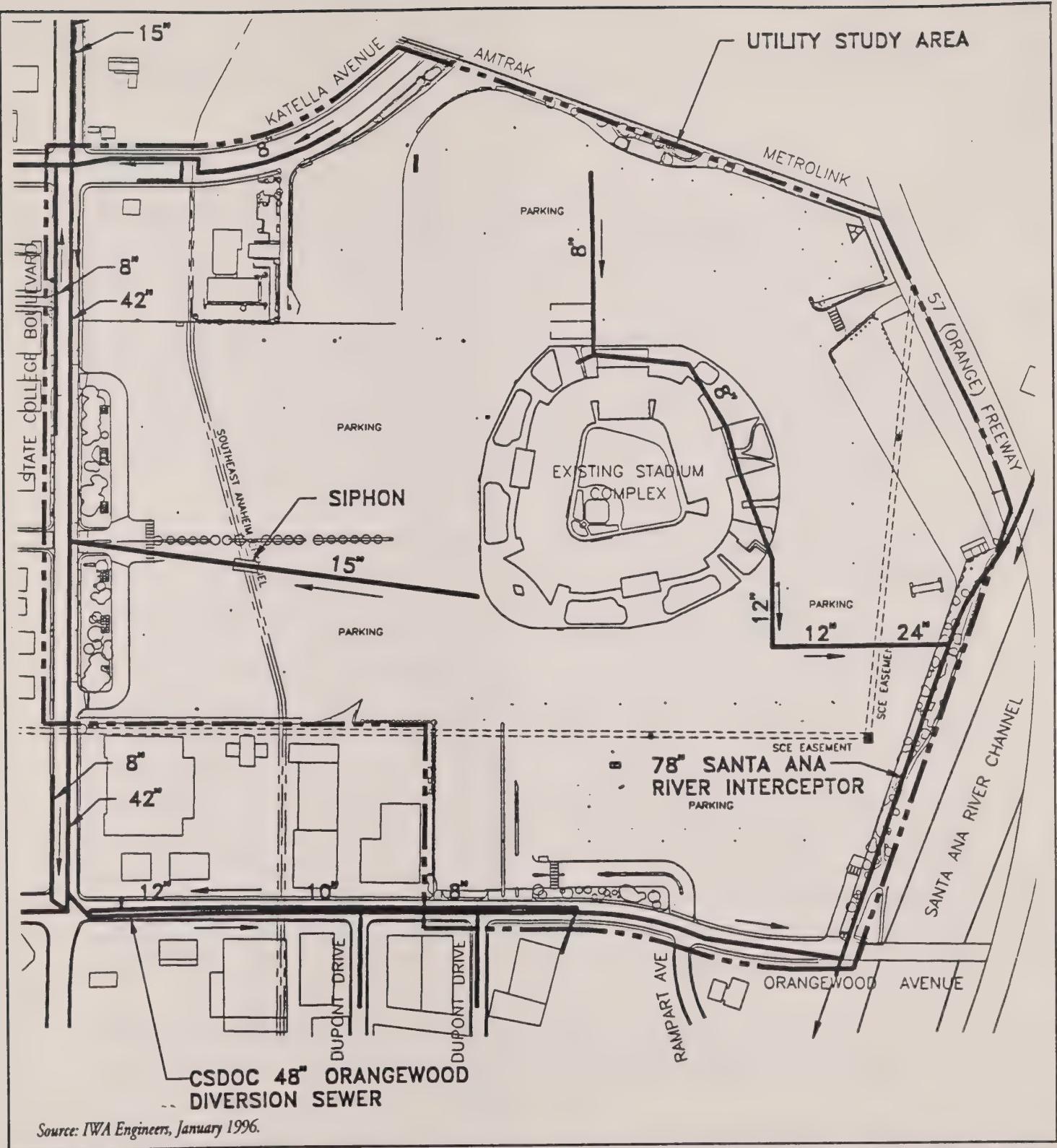
There is no breakdown of the existing flows from the site in each line. These lines would need to be metered in order to determine their respective existing flows. All of the sewer flows from the lines discussed eventually discharge into the CSDOC Reclamation Plant No.1.

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact on wastewater service if:

- Wastewater flows generated by the project cannot be accommodated by the local wastewater treatment system.
- Wastewater distribution lines are not capable of conveying the sewage generated by the project to the wastewater treatment plant.



LEGEND



Project Boundary



Existing Sewer Line



550'

275'

0'

550'

exhibit 5.8-5

Existing Sewer System

ANAHEIM SPORTS CENTER EIR

Impacts

The CSDOC is currently updating their 1990 sewer deficiency study. This is expected to be completed in early 1996. This study will determine any existing deficiencies that may exist in the current system.

As indicated in Section 3, Project Description, of this EIR, the proposed project would involve the construction of a new stadium and renovation of the existing Anaheim Stadium to result in a 70,500 seat football stadium and a 45,000 seat baseball stadium. Depending on which stadium is newly developed, impacts related to wastewater (line sizes, etc.) will differ. Therefore, this section has analyzed both development scenarios and their effects on wastewater services and facilities.

The City of Los Angeles wastewater flow generations factors and the American Society of Plumbing Engineers (ASPE) Fundamentals of Plumbing Design Handbook were used in the wastewater analysis. Based on these references, the new stadiums would generate unique flow characteristics which do not allow wastewater to be measured on an average daily basis. Rather, the generation of wastewater is classified by peak flows and measured by gallons per minute using the total number of fixtures planned for the stadium. Consequently, based on the number of new fixtures (toilet, sinks, etc.) assumed, a new or renovated 70,500 seat football stadium would generate more wastewater than the existing 70,500 seat Anaheim Stadium. Therefore, in order to accurately determine the project's projected maximum wastewater peak flow, the methodology used the difference between the amount of wastewater currently generated by the existing stadium and the proposed generation of wastewater by the new 70,500 seat football stadium, in conjunction with all other planned new uses. In addition, since activities associated with the proposed office uses would not occur during those times (evening, weekends, etc.) in which a major sporting event at the new 70,500-seat football stadium would take place, this use was not assumed in determining the project's impacts related to wastewater generation.

It should also be noted that the exact location, type, and size of the wastewater line(s) required for the project will be determined based on which stadium scenario is implemented (i.e., which stadium is newly constructed and which uses the Anaheim Stadium).

Project Generation/Peak Flows

Project implementation would generate an increase in onsite peak sewage flows of 1,009 million gallons per minute (mgm), as indicated in Table 5.8-13, Projected Maximum Increase in Wastewater Generation. According to discussions with CSDOC staff, sewer mains surrounding the project

currently have enough capacity to accommodate the flows from the Anaheim Sports Center site. In addition, the treatment plant has adequate capacity to serve the proposed project. Improvements to local lines, however, would be required and descriptions follow.

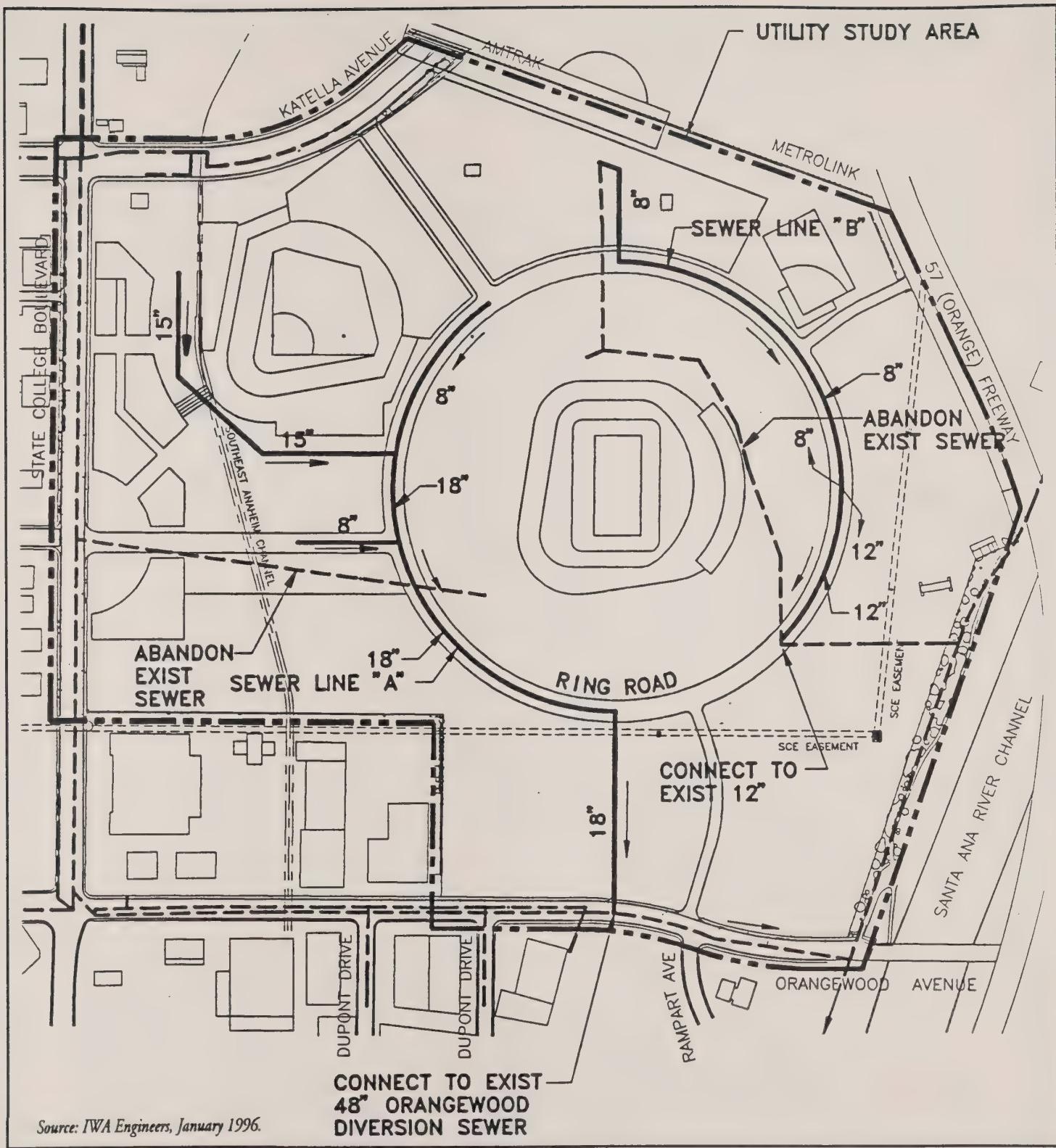
With project development, the existing onsite piping system will be replaced with new lines. The following design will eliminate the existing sewer siphon located on the westerly portion of the property since a siphon is an undesirable design feature. The following improvements would be required for either the new baseball or football stadium in the development of the Anaheim Sports Center (refer to Exhibit 5.8-6a and 6b).

TABLE 5.8-13
PROJECTED MAXIMUM INCREASE IN WASTEWATER GENERATION

Component	Area	Consumption Rate (gpm/ksf or gpm/seat)	Wastewater Generation (mgm)
<u>Proposed Uses</u>			
Stadium (70,500 seat)			925 ^a
Urban Entertainment/Retail	750,000 sf	0.055	41
Hotel No. 1 (350 rooms)	385,000 sf	0.083	32
Hotel No. 2 (150 rooms)	165,000 sf	0.083	14
<u>Existing Uses to be Removed</u>			
Commercial-Office/Professional	55,140 sf	80	-3
Total Project Net Increase			1,009
gpm = gallons per minute ksf = thousand square feet mgm = million gallons per minute sf = square feet/square foot			
^a This is the additional wastewater generated by a new 70,500-seat stadium compared to the existing 70,500-seat stadium, assuming additional fixtures as planned.			
Source: IWA Engineers, January 1996.			

New Baseball Stadium

- Relocated onsite 8- and 12-inch lines would be needed in the northeasterly section of the east ring road to accommodate flows from this area of the Sports Center site.



LEGEND



Project Boundary



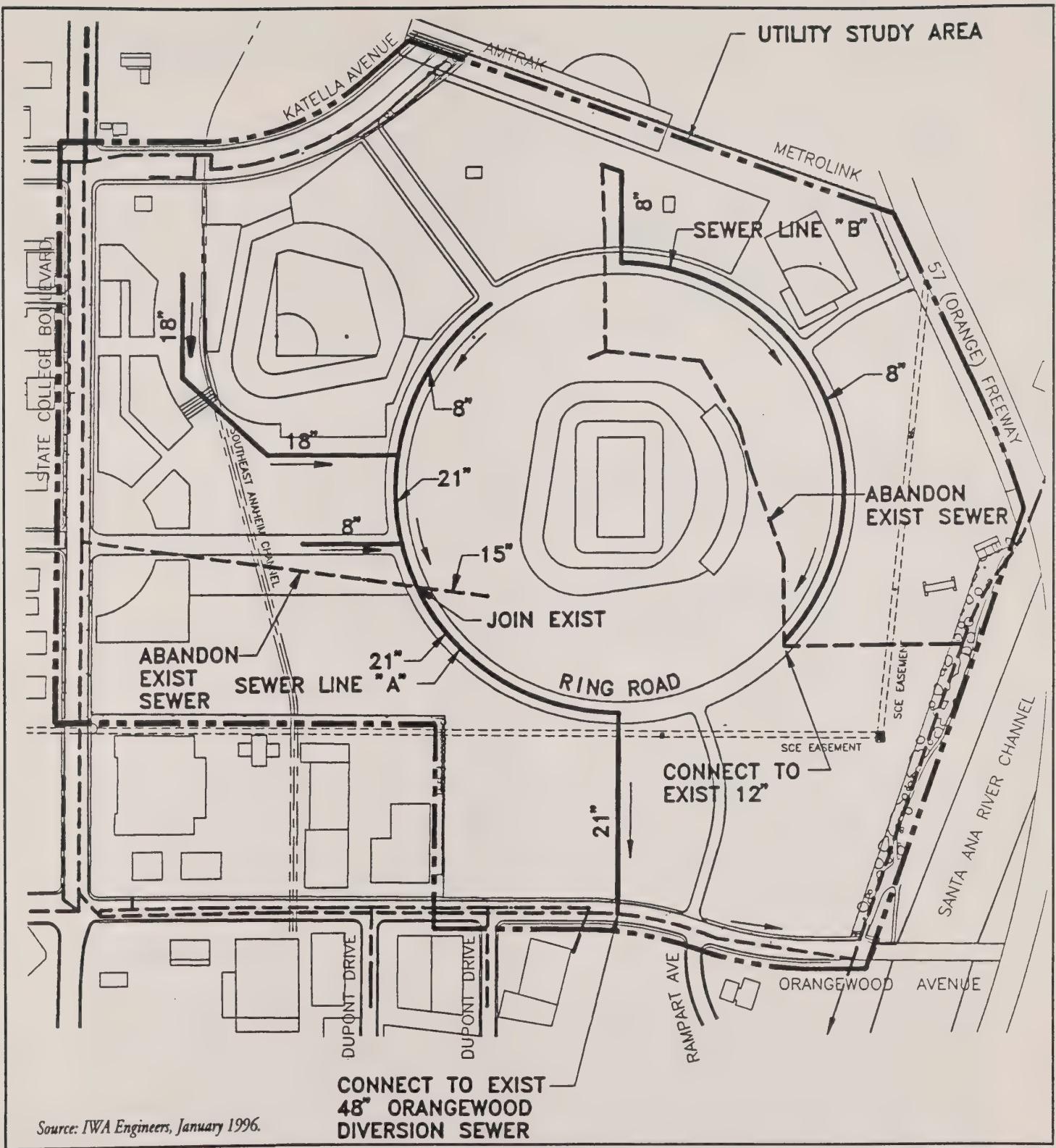
Existing Sewer Line



Proposed Sewer Line



550' 275' 0' 550'



LEGEND



Project Boundary



Existing Sewer Line



Proposed Sewer Line



550' 275' 0' 550'



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exhibit 5.8-6b

Proposed Sewer System - New Football Stadium

ANAHEIM SPORTS CENTER EIR

These 8- and 12-inch lines would connect with the existing 12-inch line that eventually connects in the SARI.

- Separate 8-, 15-, and 18-inch lines would be needed in the westerly side of the west ring road to accommodate flows from the westerly portion of the site inclusive of the new baseball stadium. These new lines would connect or run within the west ring road then travel southerly to the CSDOC Orangewood Diversion Trunk Sewer.
- Additional laterals and lines will be needed to service the various uses of the project.

New Football Stadium

- Relocated onsite 8-inch lines are needed in the northeasterly section of the east ring road to accommodate flows from this area of the Sports Center site. These 8-inch lines will connect with the existing 12-inch line that eventually connects in the SARI.
- Separate 8-, 18-, and 21-inch lines are needed in the westerly side of the west ring road to accommodate flows from the westerly portion of the inclusive of the new football stadium. These new lines will connect or run within the west ring road then travel southerly to the CSDOC Orangewood Diversion Trunk Sewer.
- Additional laterals and lines will be constructed to service the various uses of the project.

It should be noted that upon implementation of the proposed project, approximately 4,292 gpm and 6,921 gpm would remain in onsite sewer lines under development of a new baseball stadium or new football stadium, respectively. Project implementation would not result in significant impacts to the sewer system provided the improvements to local lines as identified above are implemented.

Cumulative Impacts

The study area for wastewater services is made up of residential, commercial and industrial land uses, and consists of portions of Anaheim, Garden Grove and a section of unincorporated Orange County. The study area is served by the City of Anaheim local sanitary sewer system. The proposed project and the related projects are tributary to the City's main sewer lines located in Katella Avenue, Ball Road, Cerritos Avenue/Euclid Street, Cerritos Avenue/Walnut Street, Harbor Boulevard, West Street, Orangewood Avenue, and Chapman Avenue. The first revision South Central Area Sewer Deficiency Study was recently prepared by the City for Central Anaheim, which includes a majority of the area in which the related projects are located (The Disneyland Resort, Anaheim Resort, and Hotel Circle

Specific Plan areas, etc.). The purpose of the study is to ensure adequate capacity for buildout of the project area.

The first revision Sewer Deficiency Study analyzed existing facilities for capacities or restrictions and, based on year 2010 buildout land use conditions and densities, identified necessary improvements to accommodate development within the South Central Area. The implementation of measures identified within this plan would ensure that adequate sewer capacity would be provided to the related projects. Implementation of the wastewater mitigation measures stated in Section 5.8, Public Services, Utilities and Energy Consumption will enable the sewer system to accommodate development on the project site and surrounding area. Mitigation would be provided by property owners/developers in the area on a fair share basis. No significant cumulative impact is anticipated.

Mitigation Measures

The following mitigation measures are recommended to reduce the impacts on wastewater services and facilities from the implementation of a football and baseball stadium, and ancillary facilities as proposed under the project.

Mitigation Measure 8.7.1. Prior to issuance of each building permit, the property owner/developer shall, to the satisfaction of the City Engineer, enter into an agreement with the City of Anaheim and the CSDOC to pay all connection and treatment plant capacity fees associated with the project.

Mitigation Measure 8.7.2. Prior to the issuance of the first building permit for the project, the property owner/developer shall, to the satisfaction of the City Engineer, provide funding for or construct adequate sewer facilities to accommodate flows from the northeasterly portion of the site. Implementation of a new baseball stadium would require the relocation of an onsite 8- and 12-inch line. Development of a new football stadium would require the relocation of an onsite 8-inch line. Under either scenario, these lines would be relocated to the northeasterly section of the east ring road to accommodate flows from the northeasterly portion of the site. These lines will connect with SARI.

Mitigation Measure 8.7.3. Prior to issuance of the first building permit, the property owner/developer shall, to the satisfaction of the City Engineer, provide funding for or construct an adequate sewer facility to accommodate flows from the western portion of the site. Implementation of a new baseball stadium would require a separate 8-, 15-, and 18-inch line. Development of a new football stadium would require a separate 8-, 18-, and 21-inch line. Under either scenario, these lines would be placed along the westerly side of the west ring road to accommodate flows from the western portion of the site. These lines will connect with the CSDOC Orangewood Diversion Trunk Sewer.

Mitigation Measure 8.7.4. Prior to issuance of each building permit, the property owner/developer shall provide, to the satisfaction of the City Engineer, all lateral lines and connects required to service the individual development within the planned Anaheim Sports Center.

Significant Unavoidable Adverse Impacts

Following implementation of recommended improvements and mitigation measures, no significant unavoidable adverse impacts are anticipated.

5.8.8 STORM DRAINS

Environmental Conditions

Regional Setting

The project area is served by the Southeast Anaheim Channel Facility E12 (herein referred to as SACF E12). This County storm drain channel starts at the Santa Ana River in Orange, California and proceeds in a northwesterly direction from the river approximately 1,760 to a turning point. The channel continues north for about 200 additional feet before reaching the southern City Limits of Anaheim. From this point, the channel extends north approximately 915 feet to the center-line of Orangewood Avenue and continues additional 2,800 feet north across the Anaheim Stadium site to a point at the north side of Katella Avenue. The channel then proceeds in a northeasterly direction until crossing the Metrolink commuter rail line and then proceeds north to the west along Cerritos Avenue to State College Boulevard. The channel continues north along State College Boulevard to Lincoln Avenue where it begins to collect runoff from smaller lines within the City.

The county SACF E12 begins near the intersection of State College Boulevard and Lincoln Avenue in the City of Anaheim. This facility varies in size from a 42-inch pipe at the beginning to a 11-foot by 10-foot concrete box where it enters the Santa Ana River Channel.

The Federal Emergency Management Agency (FEMA) has indicated on the Flood Insurance Rate Maps (FIRM) that the project site is within two Flood Zones. The northeasterly portion of the project site is in Flood Zone X and is subject to flooding during a 500-year storm or a 100-year storm with a flood depth less than 1 foot. The remaining area of the project site is in Flood Zone A0 which is classified as a special flood hazard area and subject to flooding during a 100-year storm with an average flood depth of 1 foot.

Orange County is in the process of improving the lower Santa Ana River from I-405 to its outfall at the Pacific Ocean. Also proposed as part of the Santa Ana River Project is construction of the Seven Oaks Dam in Redlands and raising the Prado Dam by 28.4 feet. These three improvement projects are included in OCFCD's 5-Year Capital Improvement Plan.

Local Setting

The project site slopes to the south toward the Santa Ana River.

As indicated previously, during a 100-year storm event the site will be inundated with an average of 1 foot of water. The completion of the Santa Ana River Project will allow the Santa Ana River to completely contain a 100-year storm event within its channel boundaries. The full effects of this improvement will not be evident until the construction of the Seven Oaks Dam, improvement to the Prado Dam, and downstream improvements are completed. The projected completion date for The Santa Ana River Project is 1998. However, due to budgetary constraints the improvements to the Prado Dam have been delayed. At the completion of all components of the Santa Ana River Project the project site will be outside of the 100-year flood plain.

Catch basins and gutters collect and direct the runoff to the SACF E12 which runs through the site and then to the Santa Ana River. The SACF E12 was designed in the early 1960s. Due to today's more stringent design standards, this drainage facility is considered deficient according to the City of Anaheim drainage requirements standards. The City's standard storm drainage criteria are shown in Table 5.8-14.

The SACF E12 is located within a 25-foot easement dedicated to the City of Anaheim and the OCFCD (see Exhibit 5.8-7). This easement allows for the construction of minor parking lot improvements such as curb, landscaping, etc. within the right-of-way. This facility extends southerly through the western portion of the property. The channel within the project site is an 11-foot wide by 9-foot deep concrete box culvert.

These storm drain lines, as with most of the existing lines in the study area, were designed and constructed over 25 years ago based on outdated OCFCD criteria. The OCFCD has revised their storm drain design requirements; therefore, evaluation of these existing storm drain lines under the new OCFCD criteria may indicate that most lines are currently inadequate and can only handle a two-year frequency storm event.

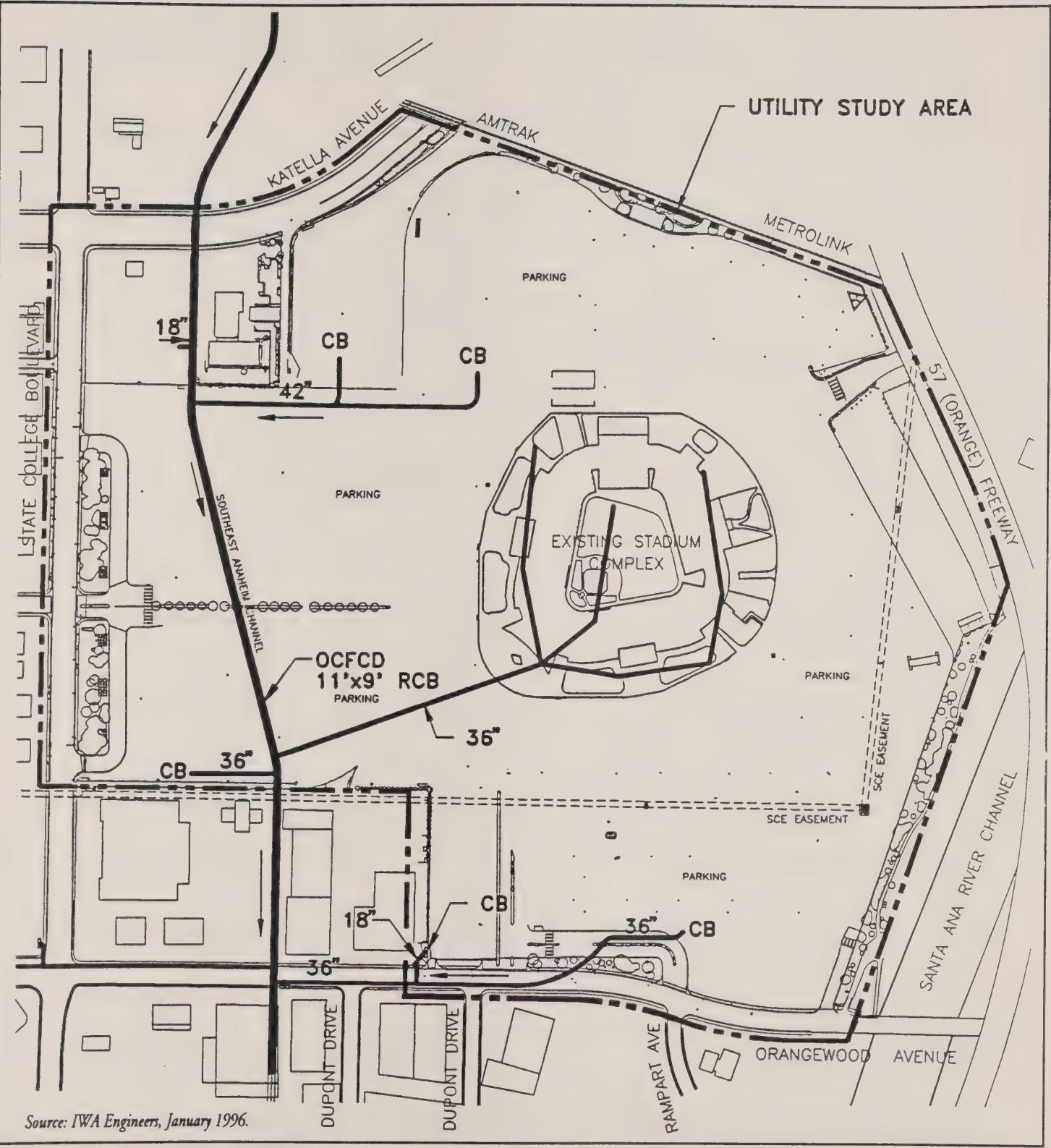


exhibit 5.8-7
Existing Drainage System
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TABLE 5.8-14
DRAINAGE DESIGN CRITERIA CHART

The use of underground storm drain systems shall be required when any one of the following conditions exist:

- a. Flows will exceed street right-of-way.
- b. Future upstream development will cause drainage problems.
- c. The flood width on arterial highways exceeds the parking lane plus one-half a travel lane or 17 feet from curb face, whichever is lesser, during a 10-year storm.
- d. The need for cross gutters on arterial highways.
- e. Excess nuisance water in residential areas (surface flow maximum is 1,000 feet).
- f. Median drainage is required.
- g. Flooding of building in a 100-year storm.
- h. Product of depth x velocity is greater than six.
- i. Flooding or street overflow will cause damage.

Design Storm Frequency for Drainage Systems*

100-Year	Arterial highways in hillside areas, storm drains connecting to the Santa Ana River
25-Year	Arterial highways in flatland areas, local streets in hillside areas, storm drains in sump conditions
10-Year	Local streets in flatland areas, onsite private drainage systems

Source: City of Anaheim Public Works Department 1992.

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impacts on storm drains if:

- Drainage flows generated onsite can not be accommodated by the local drainage system.
- Drainage distribution lines are not capable of conveying the runoff generated by the project.

Impacts

Construction

Grading of the project during construction could temporarily increase stormwater runoff erosion due to the associated removal of portions of the parking lot and the exposure of underlying soils.

The construction of the proposed stadium and retail/entertainment space would be located in the immediate vicinity of the SACF E12. According to the OCFCD, construction of this type must occur outside of the easement. No permanent structures associated with the proposed land uses would be located within the SACF E12 easement. This type of construction would also need to be conducted in close coordination with the OCFCD to avoid any adverse affects (disruption, etc.) to the SACF E12. Thus, with the decrease in runoff, the SACF E12 would be adequate to convey the stormwater runoff from the project site.

Storm Water

Runoff from the project site will be collected by onsite trench drains, area drains, and catch basins and directed via a subsurface drainage system to the SACF E12 storm drain system.

With the development of the project the storm water runoff from the site will decrease. This proposed stormwater runoff would flow to the SACF E12. The cubic feet per second (cfs) decrease is identified in the following table:

Drain 1			
	Existing (cfs)	Proposed (cfs)	Decrease (cfs)
Q_{10}	337.85	320.68	17.17
Q_{25}	408.22	386.59	21.63
Q_{100}	521.89	497.42	27.47

The decrease in stormwater runoff is due to the decrease of impervious ground cover resulting from the addition of pervious landscaped areas. This is a beneficial impact to the surrounding drainage system by reducing the flows entering the SACF E12.

As shown on Exhibit 5.8-8, the development of the project would require the following improvements to drainage facilities.

As part of the construction of the project, an extension of the existing onsite drainage system with of valley gutters, catch basins, and laterals would be needed to adequately convey stormwater runoff.

- A new drainage system would be needed to drain the northerly portion of the property. This system will be constructed within the ring road and will consist of pipe sizes ranging from 36 to 54 inches. This new drainage facility will join with the existing SACP E12.
- A new drainage system of pipes would be needed to drain the central portion of the property. This system will be constructed within the ring road and will consist of pipe sizes ranging from 24 to 42 inches. This new drainage facility will join with the existing SACP E12.
- The applicant shall apply for a National Pollution Discharge Elimination System construction permit. This permit would require the preparation of a Storm Water Pollution Prevention Plan to mitigate the erosion that may occur during construction periods from storm water runoff.

Water Quality

As discussed above, the increase in pervious areas on the project site will result in an increase in percolation of water into the underlying groundwater table. Due to the nature of the increased percolation it is not anticipated that any adverse impacts will result.

Cumulative Impacts

The analysis of cumulative impacts should be considered in conjunction with the analysis of the project's impacts, which provides a more complete discussion of the existing and future storm drain system.

The City has completed the first revision to the "Master Plan of Drainage for the South Central Area" that addresses the existing storm drain systems and the existing shortfall of storm drain capacity due to planned development in the area in which most of the related projects are located. The above study evaluates the Anaheim-Barber City Channel (ABCC), East Garden Grove Wintersburg Channel (EGGWC), and the area tributary to Carbon Creek Channel (CCC), for proposed drainage improvements at and management programs to handle drainage flows within the project area.

Although this project would have a beneficial impact on drainage, and does not require specific mitigation future development projects will be required to complete City-required mitigation measures.

Moreover, the improvements proposed by the project and recommended by the first revision to the City's Master Plan of Drainage for the South Central Area will ensure the sizing of drainage facilities to accommodate the future onsite, other related projects, and other areas that would be serviced by the storm drain system draining to the ABC, EGGWC and CCC. Therefore, implementation of these improvements would reduce potential cumulative impacts to a less than significant level.

Mitigation Measures

The development of the proposed project is anticipated to decrease the burden on the existing public drainage system and result in a beneficial impact to drainage facilities; however, the following mitigation measures are necessary for adequate onsite drainage.

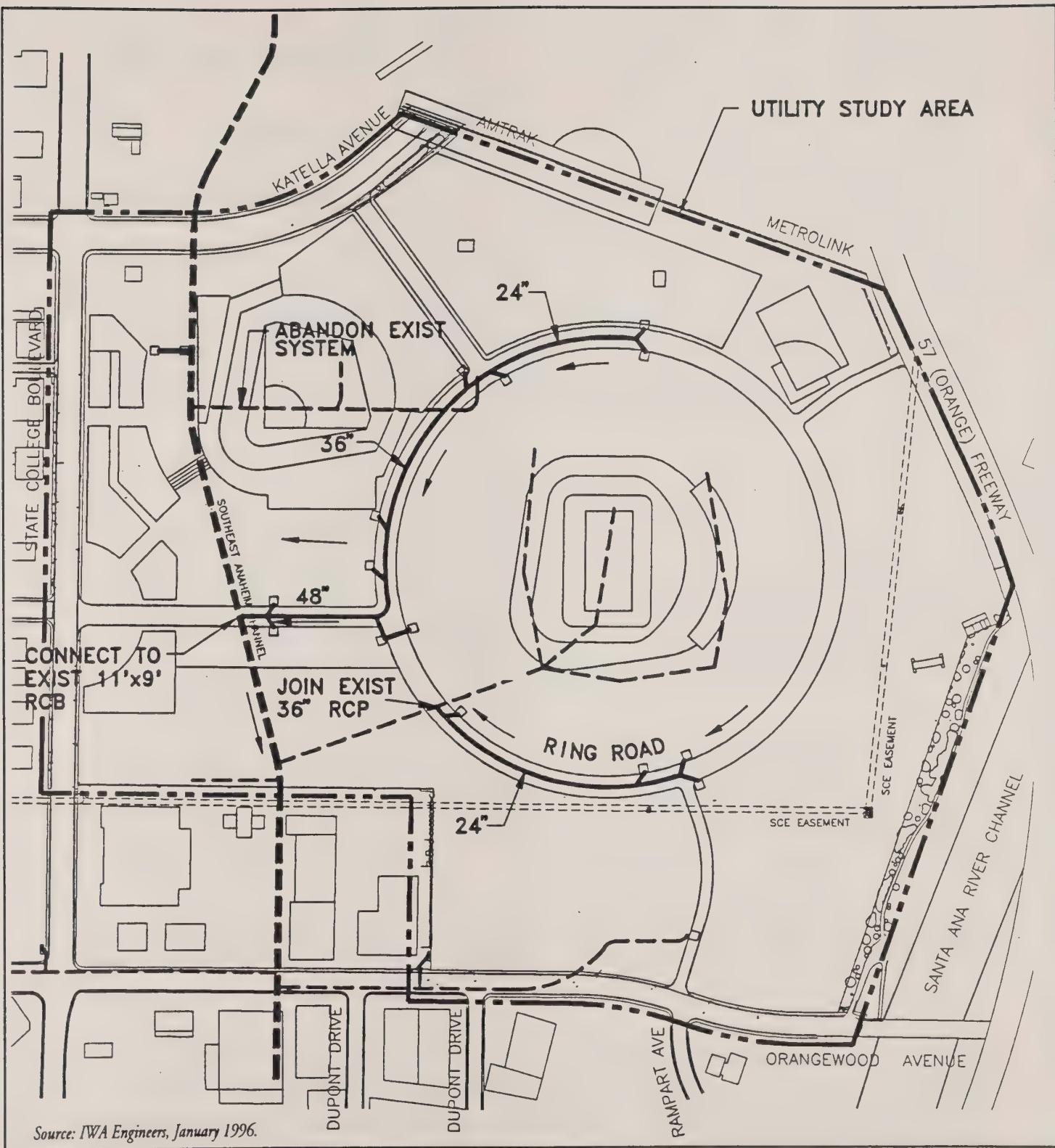
Mitigation Measure 8.8.1. The property owner/developer shall construct a new drainage system to drain the northerly portion of the property. This system will be constructed in the project's ring road and will consist of pipe sizes ranging from 36 to 54 inches. This new drainage facility will also join with the existing SACF E12. The implementation of these pipelines shall be timed to coincide with the level of development onsite that would require these improvements, to the satisfaction of the City Engineer.

Mitigation Measure 8.8.2. The property owner/developer shall construct a new drainage system of pipes that will be needed to drain the central portion of the property to the satisfaction of the City Engineer. This system will be constructed in the ring road and will consist of pipe sizes ranging from 24 to 42 inches. This new drainage facility will also join with the existing SACF E12. The implementation of these pipelines shall be timed to coincide with the level of development onsite that would require these improvements, to the satisfaction of the City Engineer.

Mitigation Measure 8.8.3. The property owner/developer shall apply for and obtain a National Pollution Discharge Elimination System (NPDES) construction permit. This permit would require the preparation of a Storm Water Pollution Prevention Plan to mitigate the erosion that may occur during construction periods from storm water runoff.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts are anticipated.



LEGEND

	Project Boundary		Existing Storm Drain Line		Proposed Storm Drain Line
	550'	275'	0'	550'	



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exhibit 5.8-8
Proposed Drainage System
ANAHEIM SPORTS CENTER EIR

5.8.9 ELECTRICITY

Environmental Conditions

Regional Setting

The City of Anaheim Public Utilities Department provides electrical services to the project area. Primary power supply for the City comes from the San Onofre Nuclear Power Plant and from the Intermountain Power Plant in Utah via the Southern California Edison (SCE) network. The Doweling Substation supplies an additional 50 megawatts for peaking requirements.

Local Setting

The project site is served by the 250 million volt amperes (MVA) Lewis Substation located on the corner of Cerritos Avenue and Lewis Street, south of Cerritos Avenue, and the 65 MVA Katella Substation at the intersection of I-5 and Anaheim Boulevard. The Katella Substation is being relocated and upgraded to a new 100 MVA Katella Substation as part of the 5-Year Capital Improvement Plan, and will be constructed at the corner of Katella Avenue and Claudina Way. The Katella Substation relocation is scheduled for completion in February 1996.

The project site is currently serviced from the Linda, Marcy, and Mueller 12 kilovolt (kV) circuits. These circuits, which are adjacent to the project site are overhead along State College Boulevard, Katella Avenue, and Orangewood Avenue, except for the portions on the existing Stadium parking lot (see Exhibit 5.8-9).

Within the last 14 months, the existing Anaheim Stadium has exhibited a peak demand of 4,545 kilowatts (kW) per day. The existing project site as a whole generates approximately 5,612 kW per day.

As part of the City of Anaheim's 5-Year Utility Underground Conversion Program, the City has approved undergrounding of all the existing and future utilities (69 kV and 12 kV transmission and distribution systems, communication systems, telephone, CAT and associated facilities) along the major roadways in the project area. This includes the future undergrounding of overhead facilities along State College Boulevard from approximately 700 feet north of Orangewood Avenue to La Palma Avenue. This is scheduled for undergrounding in the year 2001.

Electric and Magnetic Fields

Research conducted over the past decade has raised much debate over the health effects associated with electric and magnetic fields, typically referred to as electromagnetic fields (EMF). Electric fields are produced in electrical lines as a result of voltage applied to wiring, and is measured in volts per meter (V/m) or kilovolts per meter (Kv/m). Electric field strength falls off dramatically with distance, and many objects, including trees and houses shield these fields. Most exposure to residential electric fields is a result of internal household appliance use. Magnetic fields are a result of the movement (current) of electricity. These fields are measured in Gauss, however, this measure is extremely large, and fields from electrical lines are generally referred to in milligauss (mg). As with electric fields, magnetic field strength decreases dramatically with distance from the source, however magnetic fields are not shielded by objects such as trees and buildings (Bailey Research Associates 1992).

Exposure to electromagnetic fields is an existing circumstance that is typical in urban communities, including Anaheim, and the intensity of EMF varies with the type of electricity source. Whether the fields are originating from household appliances or high voltage transmission lines, public and scientific concern exists regarding the health effects resulting from exposure. The relationship between EMF exposure and health effects has not been scientifically proven; results from the plethora of epidemiological and laboratory studies that have taken place are inconclusive. Scientists for SCE, as well as most scientists to date, have found no threshold value, no dose-response, or no causative relationship that demonstrates evidence of any physical effects from EMF.

Environmental Impacts

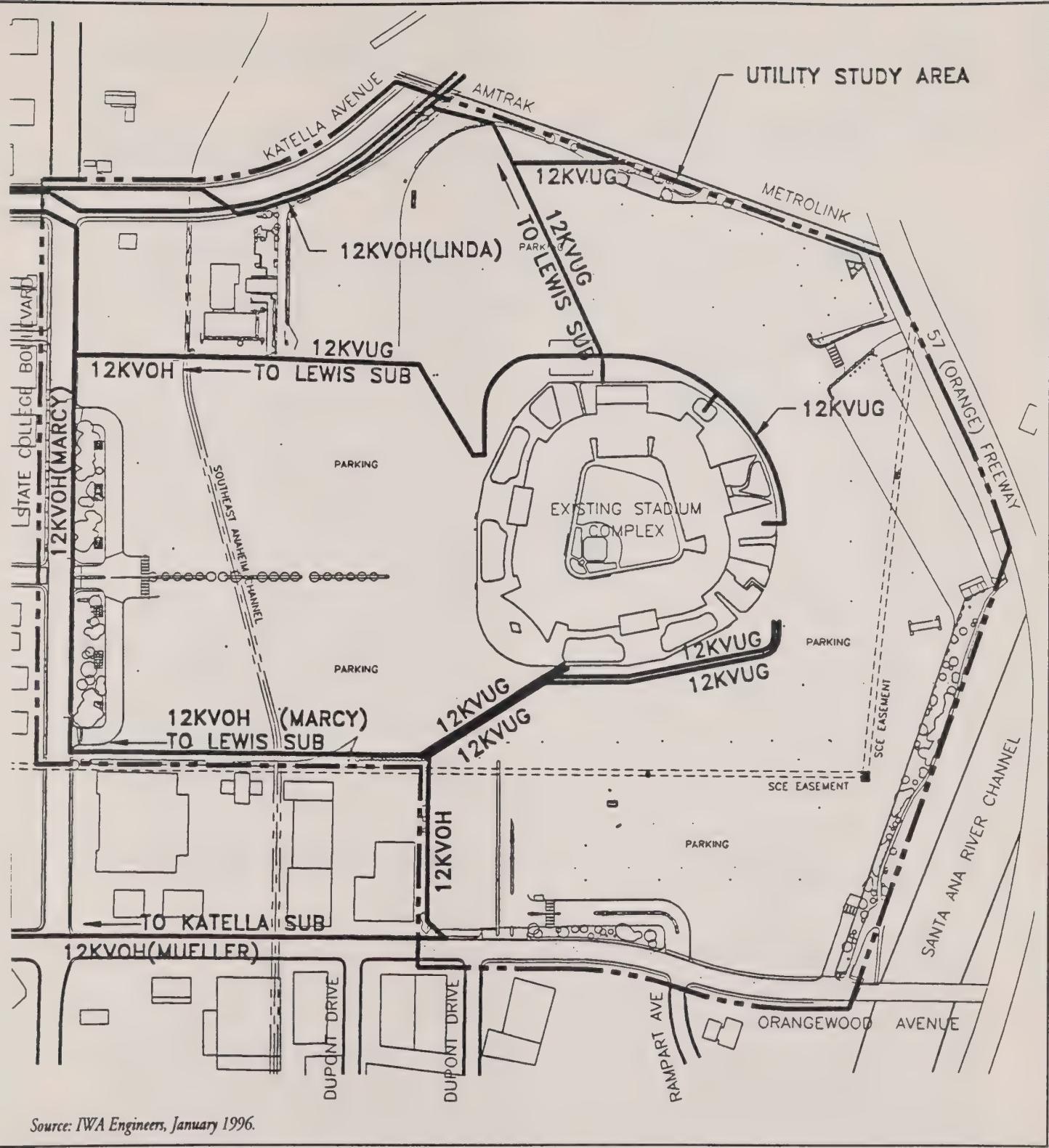
Thresholds of Significance

A project is considered to have a significant impact for electrical service if:

- Existing or future planned facilities and supplies are not adequate to serve proposed land uses.
- Electrical service or lines create a health or safety hazard.

Impacts

Full development of the Anaheim Sports Center project will increase the demand for electricity by approximately 4,241,300 million kWh annually, an estimated 11,620 million kWh on an average day



LEGEND

Project Boundary

Existing Electrical Line

UG Underground

OH Overhead

SUB Substation



550' 275' 0' 550'



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exhibit 5.8-9
Existing Electrical System

ANAHEIM SPORTS CENTER EIR

(see Table 5.8-15). Based on existing supplies, the City will be capable of meeting the total estimated additional demand generated by implementation of the proposed Anaheim Sports Center.

TABLE 5.8-15
PROJECTED MAXIMUM INCREASE IN ELECTRICITY CONSUMPTION

Component	Area	Consumption Rate (Wh/sf/day, Wh seat/day, Wh space/day)	Electrical Demand kWh/day
<u>Proposed Uses</u>			
Urban Entertainment/Retail	750,000 sf	6.7	5,025
Office Uses	900,000 sf	5.2	4,680
Hotel No. 1 (350 rooms)	385,000 sf	4	1,540
Hotel No. 2 (150 rooms)	165,000 sf	4	660
Youth Sports Center	750 seats	1	1.0
Parking	14,000 spaces	0.05	1.0
<u>Existing Uses to be Removed</u>			
Commercial-Office/Professional	55,140	5.2	-287
Total Project Net Increase			11,620
Wh = watt hour kWh = kilowatt hour sf = square feet/square foot			
Source: Michael Brandman Associates, January 1996.			

The City of Anaheim Electrical Engineering Department is responsible for the design of electrical systems throughout the City and on the project site. Moreover, to ensure that adequate electrical service is provided, development of the proposed project would require the existing onsite electrical system, as identified on Exhibit 5.8-9, to be replaced with new facilities (lines, etc.). Exhibits 5.8-10a and 5.8-10b show a preliminary design of the electrical system for the project's new stadium, as developed by the City. The following improvements would be needed for development of the project:

- A new onsite conduit system will be needed in the ring road to distribute power to the various locations throughout the site.
- New lines and appurtenances will be need as identified in Exhibits 5.8-10a and 5.8-10b to adequately supply the project area.

- Some of the overhead transmission line poles along State College Boulevard, Katella Avenue, and Orangewood Avenue may need to be relocated to accommodate new entrances, exits, etc. that would be associated with the proposed project.

Consultation with the City's Electrical Engineering Department will ensure that the proposed project will not have any impacts on existing and future planned electrical systems or facilities that would serve the site.

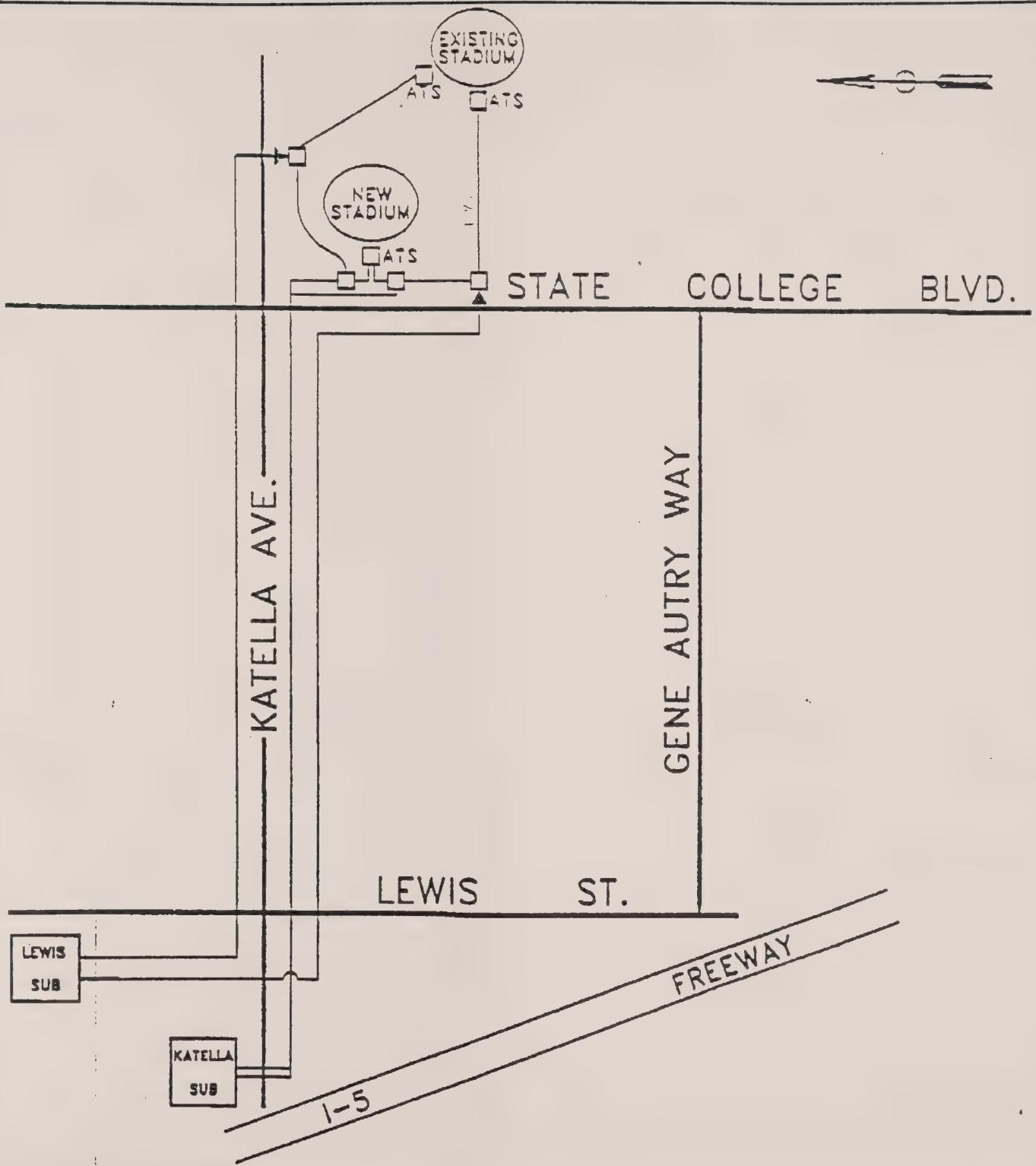
Cumulative Impacts

The study area for electrical service is generally defined by Lincoln Avenue to the north, Chapman Avenue to the south, Euclid Street to the west, and the Santa Ana River to the east, but would include those areas in which related projects within the City or Orange are located.

The total combined consumption of the project plus related projects is approximately 30,593,806 kwh annually, or 83,818 kwh per day.

Electrical power will be available to the project area as well as the related projects without a reduction in service to existing customers. A new 100-MVA substation will replace the Katella substation, which will be demolished during the widening of I-5. The construction of a 120-MVA substation at The Disneyland Resort and the 100-MVA relocated Katella substation and the added capacity to the existing Southwest Substation will reduce the cumulative impact on electrical service to a level considered not significant.

The City of Anaheim Public Utilities Department has indicated that electrical power will be available to new developments within the study area. It is infeasible to calculate the increase in consumption of the projects, but it will be related to factors such as growth and the implementation of conservation measures such as those identified below. Depending upon the magnitude of future developments, improvements may be required to expand local electrical facilities. Improvements will be undertaken on an as needed basis, and a cumulative impact to electrical service in the area is not anticipated. Regional growth and associated energy consumption is described in the Regional/Growth Management Plan EIR (see Section 5.1, Land Use and Related Plans and Policies). No significant cumulative impacts are anticipated.



NORTH NOT TO SCALE

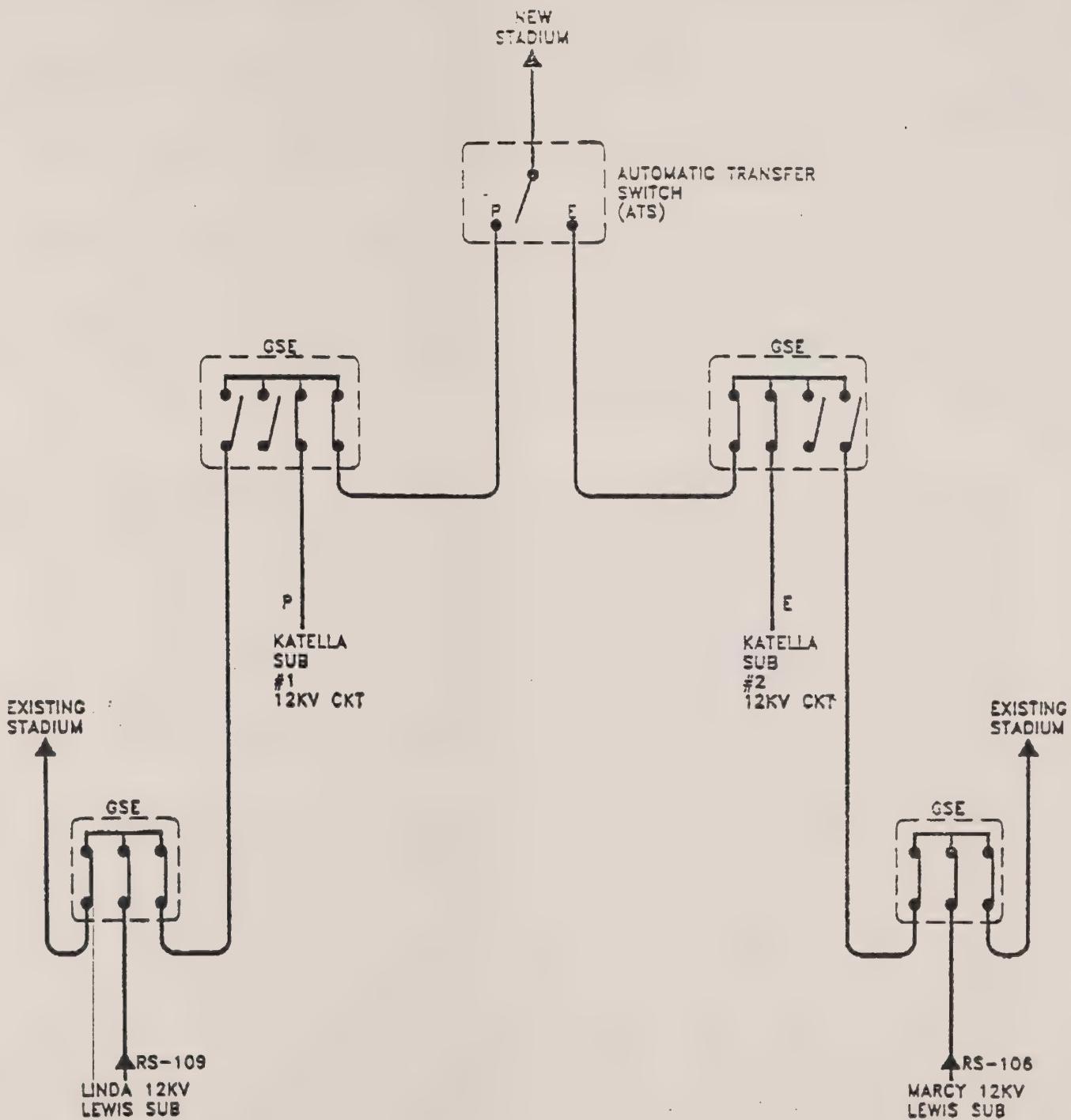


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exhibit 5.8-10a
Proposed Electrical System to New Stadium

ANAHEIM SPORTS CENTER EIR



Source: IWA Engineers, January 1996.

NORTH
NOT TO SCALE

Mitigation Measures

Implementation of the electrical improvements associated with the proposed project are required to meet the electrical service needs of the site upon completion of the Anaheim Sports Center.

Mitigation Measure 8.9.1. The property owner/developer shall construct a new conduit system, that shall interface with and/or replace the existing underground 12 kV conduit system serving Anaheim Stadium, in the ring road for onsite electrical distribution to the satisfaction of the City Public Utilities Department. The implementation of this conduit system shall be timed to coincide with the level of development onsite that would require this improvement, to the satisfaction of the City Public Utilities Department.

Mitigation Measure 8.9-2. Prior to issuance of each building permit, the property owner/developer shall submit plans showing that each structure will comply with the State Energy Efficiency Standards for Nonresidential Buildings (Title 24, Part 6, Article 2, California Code of Regulations) and will consult with the City of Anaheim Public Utilities Resource Efficiency Division in order to review above Title 24 measures prior to each final building and zoning inspection to incorporate into the project design including energy efficient designs. This consultation shall take place during project design to incorporate into the project design energy efficiency and allow potential systems alternatives such as thermal energy storage air-conditioning and building envelope options.

Mitigation Measure 8.9-3. In order to conserve energy, prior to issuance of each building permit, the property owner/developer shall implement energy-saving practices in compliance with Title 10, which may include the following:

- High-efficiency air conditions with EMS (computer) control.
- Variable Air Volume (VAV) air distribution.
- Outside air (100 percent) economizer cycle.
- Staged compressors or variable speed drives to flow varying thermal loads.
- Isolated HVAC zone control by floors/separable activity areas.
- Specification of premium-efficiency electric motors (i.e., compressor motors, air handling units, fan-coil units).
- Use of occupancy sensors in appropriate spaces.

- Use of compact fluorescent lamps in place of incandescent lamps.
- Use of T-8 lamps and electronic ballasts where application of standard fluorescent fixtures are identified.
- Use of metal-halide or high-pressure sodium (high intensity discharge) lamps for outdoor lighting and parking lots.
- Consideration of thermal energy storage air conditioning for hotel buildings, meeting facilities, theaters, or other intermittent-use spaces or facilities that may require air-conditioning during summer, day-peak periods.
- Consideration for participation in Resource Efficiency's Programs such as:
 - New Construction Design Review, in which the City cost-shares engineering fees for design of energy efficient buildings and systems.
 - Energy Sale for New Construction - Cash incentives (\$150 to \$400 per kW reduction in load) for efficiency that exceeds Title 24 requirements.
 - Thermal Energy Storage Feasibility Study - Cost sharing of up to \$5,000 for the feasibility study of TES applied to new facilities.

Mitigation Measure 8.9-4. Prior to issuance of each building permit for any buildings requiring a change in electrical service, the property owner/developer shall install an underground electrical service from the Public Utilities Distribution System. The Underground Service will be installed in accordance with the Electric Rules, Rates, Regulations and Electrical Specifications for Underground Systems. Electrical Service Fees and other applicable fees will be assessed in accordance with the Electric Rules, Rates, Regulations and Electrical Specifications for Underground Systems.

Significant Unavoidable Adverse Impacts

Implementation of the mitigation measures listed above will reduce the impact on electrical service to a level considered less than significant.

5.8.10 NATURAL GAS SERVICE

Environmental Conditions

Natural gas service is provided to the Anaheim Sports Center by Southern California Gas Company (SCG). Existing gas service pipes include a 4 inch distribution line in Orangewood Avenue and a

4 inch high pressure supply line in State College Boulevard. Both lines operate at over 60 pounds per square inch (psi). Because existing uses within the Anaheim Sports Center site do not require the use of natural gas, there are no direct lines from Orange Avenue or State College Boulevard into the Anaheim Sports Center site.

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact related to natural gas if existing planned facilities are not adequate to serve the proposed project.

Impacts

Future development within the Anaheim Sports Center site would result in the demand for natural gas services. This demand would be associated with the proposed hotels and accessory uses such as restaurants and commercial retail use (refer to Table 5.8-16). Project development is estimated to consume 87,182 million British Thermal Units (MBTU) annually.

Gas service will be added to the existing system by SCG as necessary to meet the requirements of individual development projects within the Anaheim Sports Center site. SCG has indicated that it will be able to supply the project with natural gas without impacting existing service. There will be no significant impacts from the project related to natural gas service.

Cumulative Impacts

The study area for natural gas is generally defined by Lincoln Avenue to the north, Chapman Avenue to the south, Euclid Street to the west, and the Santa Ana River to the east, but would include those areas which relocated projects within the City of Orange are located.

The total demand generated by the Anaheim Sports Center is 87,182 MBTU annually. The related projects are not concentrated in one area. SCG can meet the energy needs of the related projects without adverse impacts to surrounding uses. The total cumulative demand is not considered to be significant, because of the amount of the substantial reserves available, as identified by SCG.

TABLE 5.8-16
PROJECTED MAXIMUM INCREASE IN NATURAL GAS CONSUMPTION

Component	Area	Load (cf/sf/yr)	Natural Gas Consumption (MBTU/yr)
<u>Proposed Uses</u>			
Urban Entertainment/Retail	750,000 sf	34.8	26,100
Office Uses	900,000 sf	34.8	31,320
Hotel No. 1 (350 rooms)	385,000 sf	57.6	22,176
Hotel No. 2 (150 rooms)	165,000 sf	57.6	9,504
Youth Sports Center	750 seats	N/A ^a	N/A ^a
<u>Existing Uses to be Removed</u>			
Commercial-Office/Professional	55,140	34.8	-1,918
Total Project Net Increase			87,182
N/A - not applicable			
cf = cubic feet			
sf = square feet/square foot			
yr = year			
MBTU = million British Thermal Units			
▪ Use not expected to consume natural gas.			
Source: Michael Brandman Associates, January 1996.			

Although it is infeasible to precisely calculate the total natural gas consumption that will occur as a result of buildup of the Anaheim Sports Center plus growth of the surrounding areas, the anticipated increase will be substantial. SCG anticipates being able to meet the energy needs of this growth. Therefore, no significant cumulative impacts are anticipated, because of the reserves available.

Mitigation Measures

Although no significant impacts are projected, the following mitigation measure will reduce the use of natural gas resources.

Mitigation Measure 8.9-1. Prior to issuance of each building permit, the property owner/developer shall submit plans for review and approval which shall ensure that buildings are in conformance with

the State Energy Conservation Standards for Nonresidential Buildings (Title 24, Part 6, Article 2, California Administrative Code).

Significant Unavoidable Adverse Impacts

The Southern California Gas Company has indicated that they will be capable of meeting the energy needs of the future developments within the Anaheim Sports Center site without adverse impacts on surrounding uses; therefore, no significant unavoidable adverse impacts are anticipated.

5.8.11 CABLE SERVICE AND TELEVISION RECEPTION

Environmental Conditions

Broadcast television is provided by public stations throughout the Greater Orange County region. Currently, Multi-Vision Cable TV provides cable television service to the Anaheim Sports Center site via underground conduits. Major underground cable conduits which serve the existing project site runs from Anaheim Stadium to northwest of the stadium along State College Boulevard. This cable feeds all outlets within the stadium and also includes all the traffic information. Currently, there are upgrades and redesigns of existing and new conduits throughout the Anaheim Sports Center site (Snyder, pers. comm., 1995).

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact related to cable service and television reception if service or reception is interrupted for a substantial period of time.

Impacts

Future development planned for the Anaheim Sports Center would result in requests for cable television services, particularly at hotels and restaurants. During construction of street improvements, existing cable television facilities will need to be relocated underground or otherwise redesigned in order to accommodate new accounts. According to Multi-Vision Cable, no adverse impacts on cable service to existing customers are anticipated (Snyder, pers. comm., 1995).

Television reception of residents and businesses currently without cable television service might be negatively impacted by multi-story hotels or other tall structures within the Anaheim Sports Center site if structures physically interfere with reception.

Cumulative Impacts

The study area for television service is generally defined by Lincoln Avenue to the north, Chapman Avenue to the south, Euclid Street to the west, and the Santa Ana River to the east, but would include those areas in which related projects within the City of Orange are located. The cable service study area is the City of Anaheim.

Implementation of related projects together with the proposed Anaheim Resort Specific Plan and eventual buildup of the area may create temporary disruption of television service at area residences. As described in Section 5.8, Public Services, Utilities, and Energy Consumption, projects with multi-story structures will be required to mitigate any impacts on television reception created by these structures; therefore, no cumulative impact is anticipated. No impacts are expected to cable service.

Mitigation Measures

Mitigation Measure 8.11-1. If deemed necessary, within 6 months after completion of building exteriors of new developments over 75 feet in height, a study of area television reception shall be undertaken by the property owner/developer and submitted to the City Engineer for review and approval. If the City of Anaheim determines that the proposed project creates a significant impact on broadcast television reception at local residences and other existing hotels/restaurants or other businesses, a signal booster or relay system shall be installed by the property owner/developer immediately on the roof of the tallest project building to restore television reception to its original condition.

Significant Unavoidable Adverse Impacts

With the implementation of the mitigation measure discussed above, no significant adverse impacts on local television service/reception will occur.

5.8.12 TELEPHONE SERVICE

Environmental Conditions

Pacific Bell Telephone Company (Pacific Bell) provides telephone service to the project site via underground conduits and above-grade pole lines. Major underground telephone conduits which serve the existing Anaheim Stadium are located along Orangewood Avenue and State College Boulevard.

Additionally, Pacific Bell can provide fiber optics to facilitate high-capacity digital service. A future fiber optic cable is tentatively planned to be located along Katella Avenue between Douglass Road and Lewis Street. This is scheduled for completion during early 1996. Therefore, if needed, Pacific Bell can extend this service.

Environmental Impacts

Thresholds of Significance

A project is considered to have a significant impact on telephone service if existing or future planned facilities and supplies are not adequate to serve proposed land uses or existing telephone service is notably disrupted.

Impacts

Development of individual projects within the Anaheim Sports Center will increase the demand on the telephone service system. Additionally, there may be an increased demand for fiber optic service because it will be useful for providing teleconferencing facilities within the hotels. Telephone service will remain on standard copper wire.

Undergrounding of existing overhead telephone lines, extension of fiber optic service, and other upgrading will be provided by Pacific Bell, or any other communication provider, as needed to serve future development developed within the Anaheim Sports Center site. According to Pacific Bell, it will be able to meet the needs of the project without impacting existing customer service. Telephone service would be provided in accordance with requirements of, and at rates and charges specified in its scheduled tariffs on file with the California Public Utilities Commission (Stern, pers. comm., 1995).

Cumulative Impacts

The study area for telephone service is generally defined by Lincoln Avenue to the north, Chapman Avenue to the south, Euclid Street to the west, and the Santa Ana River to the east, but would include those areas in which relocated projects within the City of Orange are located.

Implementation of the proposed Anaheim Sports Center and related projects within the Pacific Bell service area may require expansion of existing telephone facilities and services. The phone company has indicated that it will have no difficulty in serving additional development from the Anaheim Sports Center plus related projects; therefore, no impact on telephone service to existing customers is anticipated.

Mitigation Measures

No mitigation measures are required.

Significant Unavoidable Adverse Impacts

No significant unavoidable impacts are anticipated.

5.9 HAZARDOUS MATERIALS COMPLIANCE

To determine the presence of suspected or known hazardous waste contamination sites on or adjacent to the subject property, a computerized database search of various governmental agency lists was conducted by Vista Environmental Information on July 13, 1995 (see Appendix G). CEQA requires the lead agency to consult the lists of hazardous waste sites compiled by various state agencies (the California Environmental Protection Agency [EPA], the Department of Health Services, the State Water Resources Control Board, and the California Integrated Waste Management Board) pursuant to Governmental Code Section 65962.5 (CEQA, Cal. Pub. Resources Section 21092.6). The Vista database search included review of all of the required state lists and also included a search of various federal (U.S. EPA) and local (Orange County Health Care Agency) hazardous waste sites lists. A complete description of each database searched is included at the end of the Vista report. In accordance with CEQA, the California Regional Water Quality Control Board (RWQCB) was also contacted regarding any Cease and Desist Orders or Cleanup and Abatement Orders issued for uses on the project site. Lastly, the Orange County Water District (OCWD) was contacted regarding the quality of groundwater, as determined through well testing, beneath the subject site.

5.9.1 ENVIRONMENTAL CONDITIONS

Listed Hazardous Waste Sites

The following is a summary of active known or suspected contamination sites within 0.25 mile of the subject site as identified by the Vista report or through agency consultation. The location of the sites is shown on Exhibit 5.9-1 and listed in Table 5.9-1. Sites that are listed as having underground storage tanks or as generators of hazardous waste but which are not also identified as having hazardous waste contamination are not included.

As indicated on Table 5.9-1, there are no known or potential hazardous waste contamination sites as identified by federal, state, or local agencies located on the subject property. There are five sites known to have had leaking underground storage tank(s) (LUST) within 0.25 mile of the Anaheim Sports Center property. Of the five sites, four are listed as "Case Closed/Cleanup Complete." The remaining LUST site, Stadium Motors, located approximately 0.1 mile northeast of the Anaheim Sports Center site, involves waste oil that has affected soil/sand/land but not groundwater. Due to the viscosity of waste oil, it is unusual that contamination extends beyond the immediate area (i.e., soil) to groundwater. Because of the distance of the contaminated soil from the project site and given that groundwater has not been, and will likely not be, affected, it is unlikely that contamination originating from Stadium Motors would affect the Anaheim Sports Center property.

TABLE 5.9-1
LOCATION OF SITES INCLUDED ON AGENCY LISTS
WITHIN A QUARTER MILE OF THE ANAHEIM SPORTS CENTER

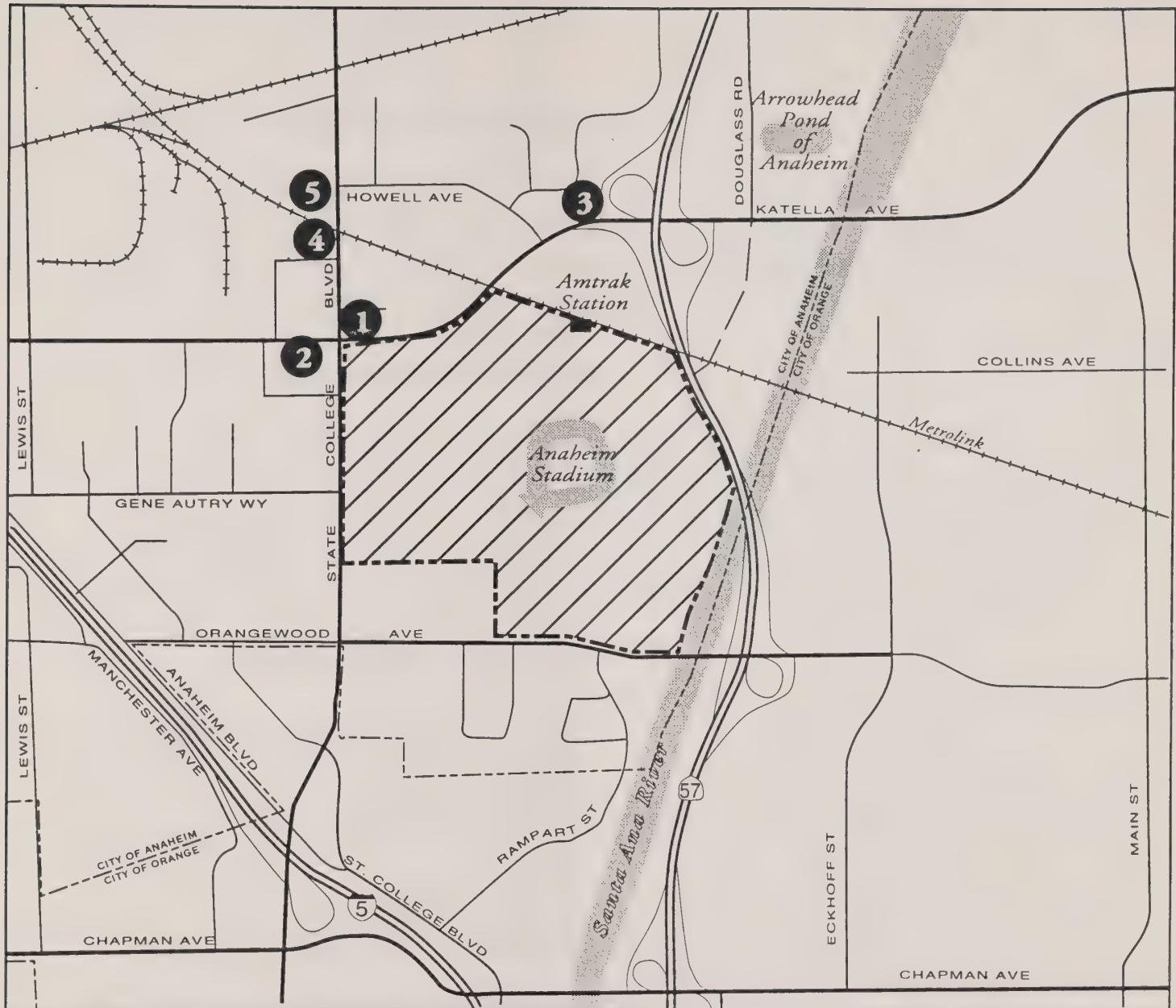
No.	Name/Address	Identified by*	Type of Contamination/Status
1	Unocal Service Station 2001 Katella Ave., E	LUST	Waste oil/Case Closed and Cleanup Complete
2	Arco Service Station #6220 1801 State College Blvd., S	LUST	Unleaded gas/Case Closed and Cleanup Complete
3	Stadium Motors, Inc. 2225 Katella Avenue	LUST/ Cortese	Waste oil (soil, sand, land)/Remedial Action Plan
4	Cetron Corporation 1701 State College Blvd., S	LUST	Toulene/Case Closed and Cleanup Complete
5	Texaco Service Station 1650 State College Blvd., S.	LUST	Gasoline/Case Closed and Cleanup Complete

* LUST = Leaking Underground Storage Tank List

Source: Vista Environmental Information, Inc. 1995.

According to a representative with the RWQCB, no Cease and Desist or Cleanup and Abatement Orders have been issued for existing onsite uses on the Anaheim Sports Center site (Sarami, pers. comm. 1995).

Information received from the OCWD indicates that there are two wells located on the proposed project site. The first well, identified by the OCWD as SAR-3, is a monitoring well located on the eastern border of the property near the point where SR-57 crosses the Santa Ana River channel. The second well, identified by the OCWD as A-33, is a production well located to the south of the existing stadium. The most recent groundwater sample results taken in April and May 1995 at wells SAR-3 and A-33, respectively, indicated that the groundwater at both wells meets OCWD's primary drinking water standards (OCWD 1995).



LEGEND

-  Project Site
-  1 Unocal Service Station: 2001 East Katella Avenue
-  2 Arco Service Station #6220: South State College Boulevard
-  3 Stadium Motors, Inc.: 2225 Katella Avenue
-  4 Cetron Corporation: 1701 South State College Boulevard
-  5 Texaco Service Station: 1650 South State College Boulevard

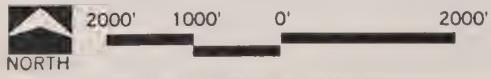


exhibit 5.9-1
Location of Sites Included on Agency Lists

Historical Use of Hazardous Materials and Waste

Based on a review of historical aerial photographs of the site, there is the potential that hazardous materials, such as various fuels and pesticides/herbicides from the historical agricultural use of the property, were used and stored onsite. However, as indicated above, no records were found in agency files indicating the presence of contamination from historical use of the property.

Existing Use of Hazardous Materials and Waste

Various hazardous materials are currently used and stored onsite. Such materials include cleaning chemicals, fuels and other hydrocarbon products, solvents, etc., used during operations of the facilities and for maintenance purposes. All hazardous waste generated onsite is disposed of at an appropriate offsite facility. No federal, state, or local agency has identified the presence of contamination from the existing use and storage of hazardous materials and/or generation of hazardous waste onsite.

5.9.2 ENVIRONMENTAL IMPACTS

Thresholds of Significance

For the purpose of this analysis, an impact related to hazardous materials compliance is considered significant if:

- The exposure of people or the environment to hazardous materials is in excess of federal, state, or local regulatory standards.

Historical and Existing Use of Hazardous Materials and Waste

There is the potential that previously unknown hazardous materials contamination from historical use of the property, or from the current use of hazardous materials (pesticides/herbicides, etc.) onsite, may be encountered during project development activities. However, it should be noted that should such contamination exist, existing federal, state, and local policies and procedures would require the delineation and remediation of sites containing hazardous substances to the satisfaction of the designated lead agency. In addition, it is unlikely that any such contamination would be extensive or beyond the capabilities of typical remediation measures. Therefore, no significant impacts from former or existing uses of the property are anticipated.

Future Use of Hazardous Materials and Waste

Operation and maintenance of the Anaheim Sports Center will result in the additional use and storage of hazardous materials and in an increase in the amount of hazardous waste generated onsite. However, continued compliance by onsite uses with regulations, standards, and guidelines established by EPA, the state, and Orange County relating to the storage, use, and disposal of hazardous waste will reduce the potential risk of hazardous materials exposure to a level less than significant.

5.9.3 CUMULATIVE IMPACTS

The study area for cumulative effects of hazardous materials exposure is an area extending 0.25 mile from the boundary of the site.

As indicated above, there are no significant impacts expected to occur with implementation of the Anaheim Sports Center. As such, there are no cumulative impacts.

5.9.4 MITIGATION MEASURES

Although no significant hazardous materials exposure impacts are anticipated, the following mitigation measures are included to ensure that any potential impacts associated with the project are reduced to a level less than significant.

Mitigation Measure 9-1. Ongoing during demolition and construction, in the event that hazardous waste is discovered during site preparation or construction, the property owner/developer shall ensure that the identified hazardous waste and/or hazardous material is handled and disposed of in the manner specified by the State of California Hazardous Substances Control Law (Health and Safety Code, Division 20, Chapter 6.5) and according to the requirements of the California Administrative Code, Title 30, Chapter 22.

Mitigation Measure 9-2. The applicant shall handle and dispose of all hazardous materials and wastes during the operation and maintenance of facilities in accordance with the state codes identified in Mitigation Measure No. 2 above.

5.9.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Implementation of mitigation measures will reduce the hazardous materials exposure impacts to a level less than significant.

5.10 AESTHETICS

The following analysis addresses visual resources from a number of viewing locations within the project area and the potential for impacts to occur at these locations related to the changes in visual conditions as a result of implementation of the Anaheim Sports Center project.

5.10.1 ENVIRONMENTAL CONDITIONS

Visual Setting

The Anaheim Sports Center site is located in an area of the City of Anaheim that contains relatively flat topography. The variety and intensity of existing land uses within the Anaheim Sports Center site and surrounding areas create a setting that is urban in character. There are no distinct natural landscape features or natural visual resources or vistas within the project area, nor is there any natural open space onsite. Please refer to Section 5.1, Land Use and Related Planning Programs, of this EIR, for a detailed description of existing land uses within and around the project area.

Due to the flat topography, existing views directly into the project site are generally limited to adjacent roadways and structures and SR-57. The top of Anaheim Stadium can be seen from many surrounding uses and streets in the project vicinity. Anaheim Stadium is not visible from the nearest existing residential uses located approximately 0.3 mile and 0.5 mile south and southeast of the site, respectively.

Typically, major arterial streetscapes within the project area (i.e., Katella Avenue, State College Boulevard, and Orangewood Avenue) are dominated by newer commercial/office buildings and somewhat older light industrial complexes, associated landscaping, and overhead utility lines. No scenic corridors or highways are located in the vicinity of the project site.

Most structures within the project area are one to three stories in height, but there are several taller structures, primarily office buildings to the north of the project site, and the existing Anaheim Stadium and Arrowhead Pond of Anaheim.

Zoning Standards

The majority of the site is currently zoned PR, Public Recreational. The area in the northwest corner of the site currently zoned CO, Commercial, Office, and Professional; and ML, Limited Industrial, and a small parcel in the southern portion of the site currently zoned ML are proposed for a zone

change to PR, Public Recreational, as part of this project. Current regulations for the PR, Public Recreational zone (Anaheim Municipal Code 18.86.010-110), do not contain standards which specify height limitations or setbacks for development within this designation.

Shade, Shadow, and Illumination

In general, the cast of shadows from structures currently located on the project site is confined to parking areas adjacent to the existing Anaheim Stadium. Shadows originating from the Anaheim Stadium do not presently fall onto uses surrounding the project site.

Due to the urbanized setting, night lighting is widespread throughout the project area. This lighting adds to the ambient light within the project area.

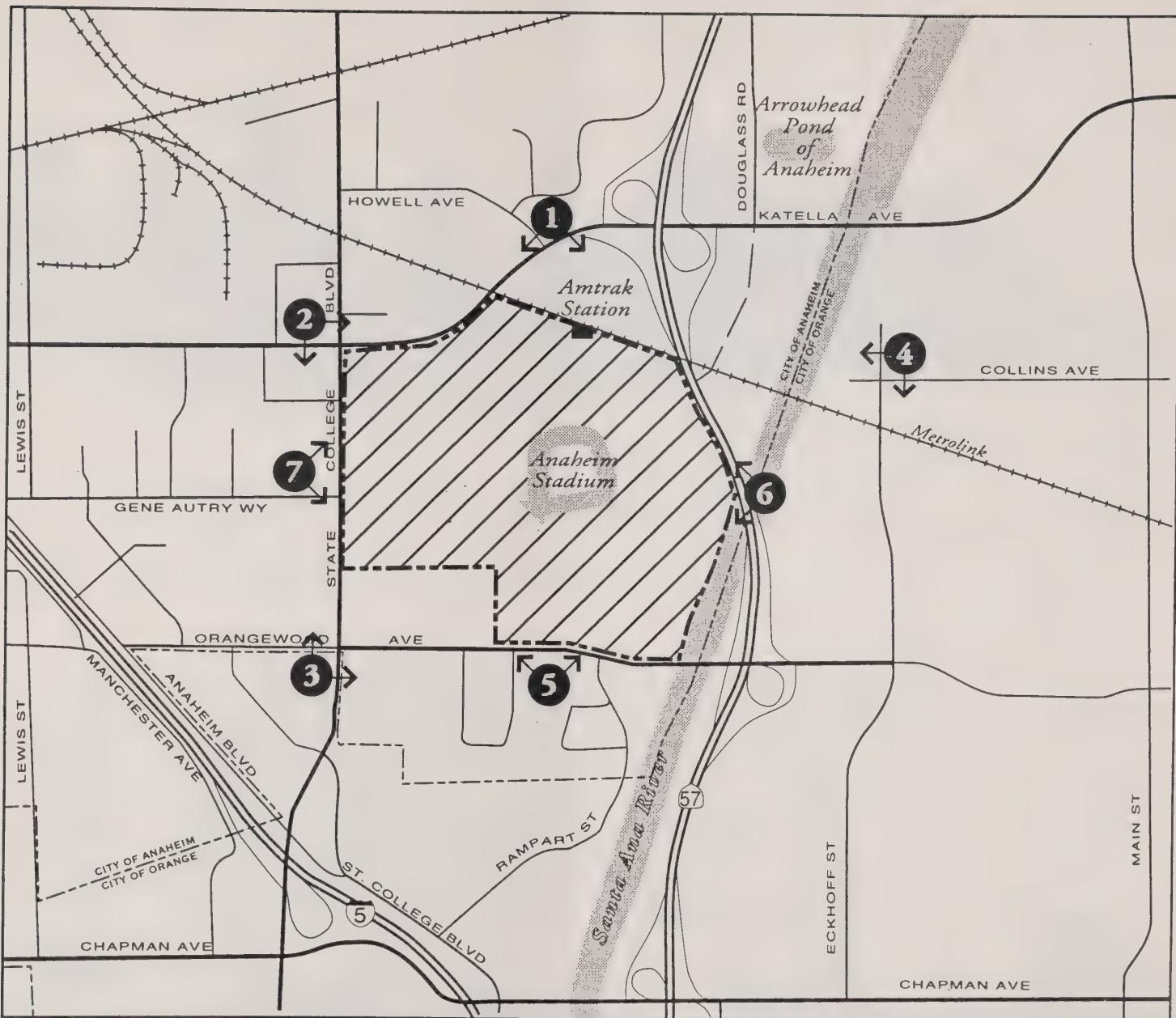
Existing ambient sources of nighttime lighting within the project area are characterized by neon and fluorescent signage associated with adjacent commercial and retail land uses, parking lot lighting, structural lighting for hotels and restaurants, overhead street lighting along adjacent roadways, lighting from vehicle headlights and sign/building illumination, and lighting during nighttime sporting events at the existing Anaheim Stadium.

Views From Surrounding Uses

Photographs were taken to represent the existing visual conditions within and around the project area. Exhibit 5.10-1, Photograph Location Map, provides a graphic illustration of views of the site from the surrounding area. This exhibit also depicts the direction in which these photographs were taken. Exhibits 5.10-2 through 5.10-5, Project Site Photographs, show the identified areas. The dominant focal point of existing views of the project site is of the existing Anaheim Stadium.

Viewpoint Location 1

This is a view looking south towards the project site from the intersection of Howell Avenue and Katella Avenue. Existing office uses are in the foreground, associated parking and landscaping is in the middle ground, with the upper portion of the existing Anaheim Stadium in the background of this viewshed (see Exhibit 5.10-2).



LEGEND

Project Site

Viewpoint Location



2000' 1000' 0' 2000'



Michael Brandman Associates

19870001 • 7/95

exhibit 5.10-1
Photograph Location Map
ANAHEIM SPORTS CENTER EIR



Location 1. View of the project site looking south from the intersection of Howell Avenue and Katella Avenue.



Location 2. View of the project site looking southeast from the intersection of State College Boulevard and Katella Avenue.

Source: Michael Brandman Associates, July 1995.



Michael Brandman Associates

19870001 • 7/95

exhibit 5.10-2
Project Site Photographs (1 and 2)

ANAHEIM SPORTS CENTER EIR



Location 3. View of the project site looking northeast from the intersection of Orangewood Avenue and State College Boulevard.



Location 4. View of the project site looking southwest from the intersection of Collins Avenue and Eckhoff Street.

Source: Michael Brandman Associates, July 1995.



Michael Brandman Associates

19870001 • 7/95

exhibit 5.10-3
Project Site Photographs (3 and 4)

ANAHEIM SPORTS CENTER EIR



Location 5. View of the project site looking north from the intersection of Orangewood Avenue and Rampart Street.



Location 6. View of the project site looking west from the Santa Ana River and SR-57 Freeway.

Source: Michael Brandman Associates, July 1995.



Michael Brandman Associates

19870001 • 7/95

exhibit 5.10-4
Project Site Photographs (5 and 6)

ANAHEIM SPORTS CENTER EIR



Location 7. View of the project site looking east from the intersection of State College Boulevard and Gene Autry Way.

Source: Michael Brandman Associates, July 1995.



Michael Brandman Associates

19870001 • 7/95

Viewpoint Location 2

This is a view of the project site looking southeast at the corner of State College Boulevard and Katella Avenue. As shown, existing onsite commercial uses and associated landscaping are visible in the foreground; and again, the upper portion of Anaheim Stadium is visible in the background (see Exhibit 5.10-2).

Viewpoint Location 3

This illustrates the view of the project site area looking northeast from the corner of Orangewood Avenue and State College Boulevard. Industrial uses are visible in the foreground, with the upper portion of Anaheim Stadium in the background (see Exhibit 5.10-3).

Viewpoint Location 4

This photograph was taken at the corner of Collins Avenue and Eckhoff Street looking southwest towards the site. Landscaping and commercial/industrial uses dominate the foreground and middle ground of this viewshed. The upper portion of Anaheim Stadium is visible in the background (see Exhibit 5.10-3).

Viewpoint Location 5

This is an unobstructed view of the project site looking north from Orangewood Avenue near Rampart Street. The parking lot is visible in the foreground, with Anaheim Stadium and landscaping in the middle ground and office uses and SR-57 in the background (see Exhibit 5.10-4).

Viewpoint Location 6

This is a view looking west towards the project site from the Santa Ana River trail and SR-57. The existing parking lot and the stadium's trash receptacle facility is visible in the foreground, with Anaheim Stadium and commercial/office uses in the background, respectively (see Exhibit 5.10-4).

Viewpoint Location 7

This shows the site looking east from the intersection of State College Boulevard and Gene Autry Way. The stadium entrance and sign are visible in the foreground. Anaheim Stadium is visible in the middle ground, with commercial/office uses in the background (see Exhibit 5.10-5).

5.10.2 ENVIRONMENTAL IMPACTS

Thresholds of Significance

For the purpose of this analysis, an impact on the visual and aesthetic nature of the area is considered to be significant if the project would result in:

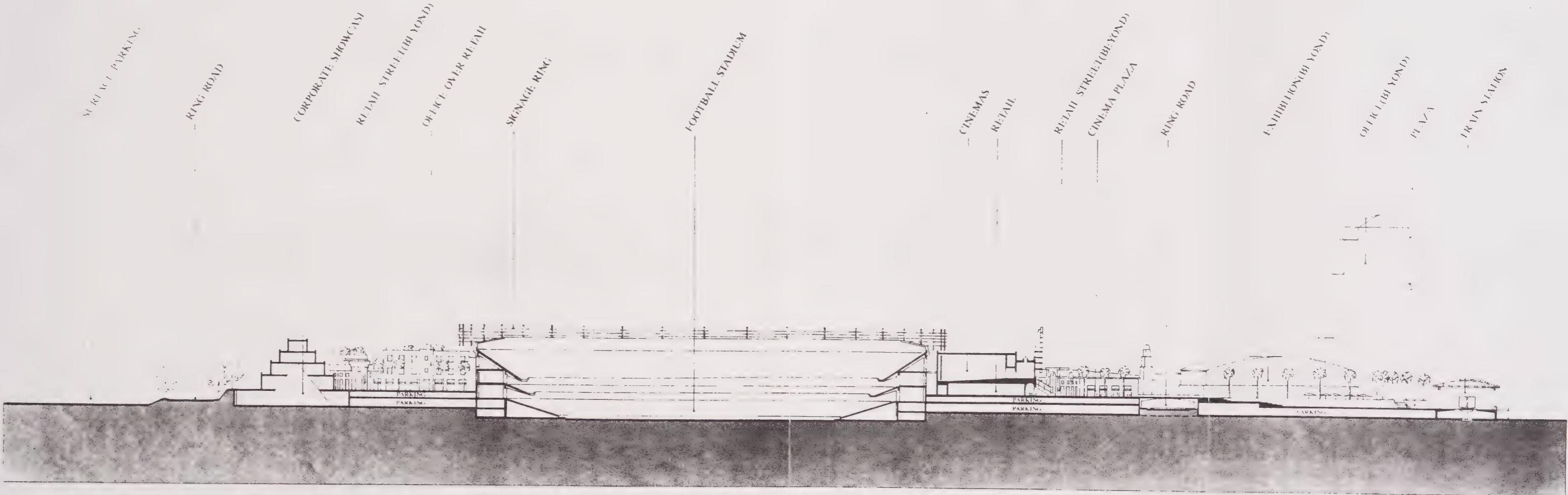
- Substantial obstruction and/or demonstrable negative effect on views.
- Substantial deterioration of the perceived aesthetic character of a visual asset or scenic easement.
- Substantial visual incompatibilities arising from introduction of development into existing open space.

Visual Character Effects/Affects on Views

As described in Section 2, Project Description, of this EIR, the proposed Anaheim Sports Center involves renovation of the existing Anaheim Stadium and reconfiguration of the existing parking area, construction of a new stadium and complementary uses such as a retail/entertainment center, hotels, office/professional space, and the continuation of exhibition activities. A motorized tram system would operate using the roadway network within the project area to carry visitors from The Arrowhead Pond of Anaheim to the project site.

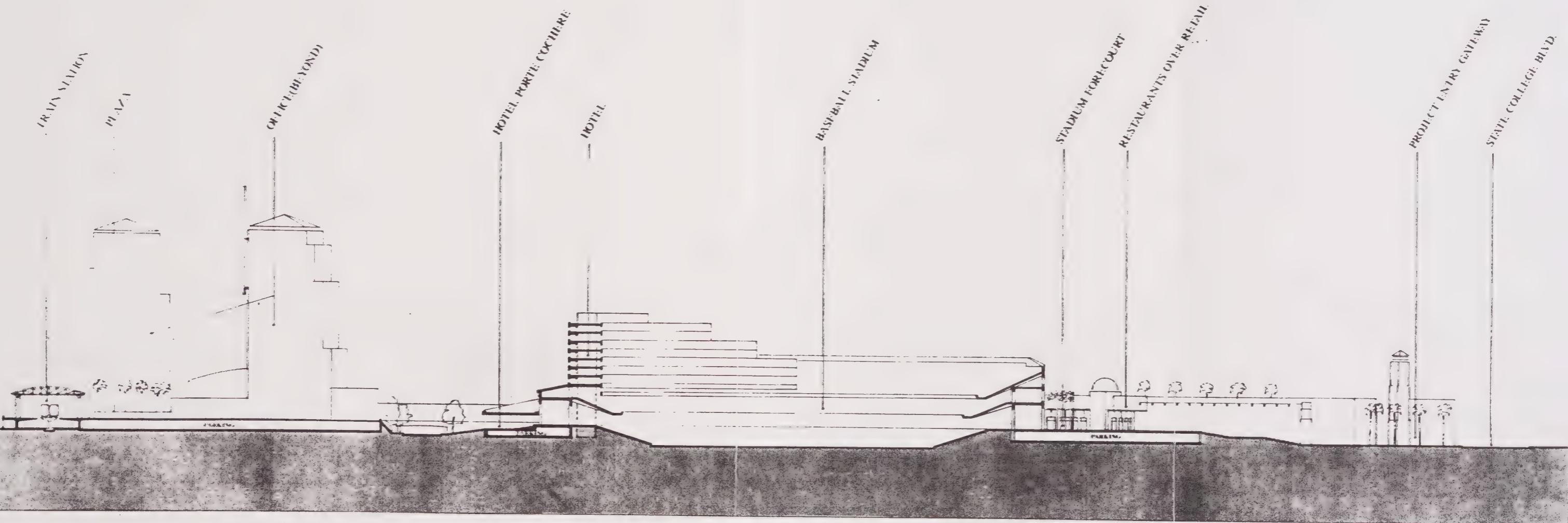
Typical cross sections showing the proposed development are presented in Exhibits 5.10-6 and 5.10-7. As shown on Exhibits 5.10-6 and 5.10-7, building heights of proposed development will not exceed the height of the existing Anaheim Stadium, with the exception of the proposed hotel and office buildings to be located in the northern portion of the site.

During construction of the project, it is expected that, views of the site from surrounding areas would be altered due the preparation of buildable areas (new stadium, office towers, etc.) onsite through grading activities and the presence of construction equipment and building materials. This condition would persist to some degree until building construction and landscaping of the proposed project are completed. The construction-related view impacts that would affect views of the surrounding area would not be considered significant because of their short-term nature. Completion of the proposed project is expected to reduce the perceived impact of this construction phase of the project.



Source: *The Jerde Partnership, July 1995.*





Source: The Jerde Partnership, July 1995.



Development of the Anaheim Sports Center will result in the intensification of the existing urban and commercial-recreation character of the project area. The most notable alteration of existing views will be from motorists traveling along SR-57, Orangewood Avenue, and State College Boulevard, and uses directly adjacent to the project site. The proposed architecturally consistent, well-landscaped, commercial-recreation center represents an aesthetic improvement to the existing views from these locations which currently consist of the existing Anaheim Stadium surrounded by a vast expanse of asphalt parking areas. As stated earlier, the existing stadium is not visible from the nearest residences located approximately 0.3 mile and 0.5 mile south and southeast of the site, respectively. Thus, due to the flat topography and that the location of the proposed structures which will be taller than the existing stadium are in the northern portion of the site, no alteration of the existing views to the nearest residences is anticipated.

Given the location of the project site in an area that has been highly urbanized with commercial and recreational uses, the project will not result in significant deterioration of the visual character in the project vicinity. Overall, development of the project will result in beneficial visual impacts to surrounding land uses and the general area.

Consistency With Zoning Standards

As discussed in Section 5.10.1 above, there are no standards which specify height limitations for development within the PR zone. Thus, no inconsistency of the proposed development with zoning standards of the site will occur.

Shade, Shadow, and Illumination

Because of the similar elevation and flat topography of the site with surrounding areas and the location of the taller proposed structures (i.e., the stadium, the office buildings, hotel, and rail station) within the interior of the project site, no shade and shadow impacts on offsite uses are anticipated.

Being that neither the new stadium, youth sports center, nor existing stadium will be operating at the same time, no new light and glare impacts would occur as it relates to stadium activities. However, light from parking facilities, retail/office uses, and other visitor-serving uses within the project site will add to the illumination of the area at night. Nighttime illumination of buildings, pedestrian walkways, parking areas, and roadways internal to the project area will be used to highlight building design features, emphasize prominent entrances and plazas, and create a feeling of security. Light and glare minimization design features have been incorporated into the project to reduce potential impacts to a level of less than significant. Such features include the use of non-reflective or low-reflective

types of glazing and the design and installation of outdoor lighting so that it is confined downward into the site. Due to the distance from the project site, the flat topography, and screening provided by existing structures and landscaping, no change in the existing ambient night light in the vicinity of the nearest residential uses located approximately 0.3 mile and 0.5 mile south and southeast of the site, respectively, is anticipated.

Construction of development within the Anaheim Sports Center will create visual disruption within the project area, including removal of some landscaping, grading, demolition of existing structures in the northwest corner of the site, and other infrastructure and building construction. Construction impacts will be temporary and are not considered to be significant.

5.10.3 CUMULATIVE IMPACTS

The study area for cumulative effects to visual resources is a 0.5-mile border around the Anaheim Sports Center.

The study area is characterized by urban uses and does not contain any scenic resources or natural open space areas. Development within the study area, including development of the proposed Anaheim Sports Center, would not result in a change in the existing urban character of the area. Therefore, the proposed project would not contribute to a significant cumulative aesthetic impact.

5.10.4 MITIGATION MEASURES

No significant impacts would occur; therefore, no mitigation measures are required.

5.10.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable impacts would occur as a result of project development.

5.11 CULTURAL RESOURCES

A record search for the Anaheim Sports Center site and surrounding area was prepared by the California Regional Archaeological Information Center at the UCLA Institute of Archaeology in June 1995. The complete report is included in Appendix F of this draft EIR and is summarized below.

5.11.1 ENVIRONMENTAL CONDITIONS

Cultural resources include fossils, remains, and artifacts from prehistoric civilizations, historic structures, and other antiquities. A records search to identify cultural resources within a 1-mile radius of the Anaheim Sports Center site included a review of all recorded historic and prehistoric archaeological sites within the project area and a review of all known cultural resource surveys and excavation reports. In addition, the search included a review of historic maps, the National Register of Historic Places, the California State Historic Resources Inventory, the listing of California Historical Landmarks, and the California Points of Historical Interest. The following provides a discussion of the findings from the record review.

Prehistoric Resources

Prehistoric resources include fossils, archaeologic and paleontologic remains, and early Native American artifacts. No prehistoric sites were identified within a 1-mile radius of the project site.

Historic Resources

Historic sites typically include European-style agricultural, rural, or urban development. Inspection of historic maps (Anaheim 1896 and 1942 15' series quadrangle) indicates that in 1896 the Santa Ana River, located to the east of the project site, was perennial and consisted of several braided channels flowing through a wash. The river was still unleveed at that time. Just west of the river within a 1-mile radius of the project area, a few buildings and several developed roads had been built. East of the river several buildings and an open street grid pattern had been constructed. According to the 1896 quadrangle, one bridge crossed the Santa Ana River. Both the Southern Pacific Railroad and the Atchison, Topeka, and Santa Fe Railroad passed within a 1-mile radius of the project area.

According to the 1942 quadrangle, the Santa Ana River had been leveed. An open street grid pattern and several buildings existed on either side of the river. In addition, a few more bridges extended over the river. Ball Road, Katella Avenue, Chapman Avenue, Lewis Street, Placentia Avenue, and Main Street had all been labeled on the 1942 quadrangle. In addition, the existing Santa Ana Freeway

(I-5) alignment was labeled U.S. Route 101 (U.S. 101) from the existing location of Anaheim Boulevard. U.S. 101 headed north through the City of Anaheim. By 1942, an additional branch of the Southern Pacific Railroad had been built, which connected the City of Anaheim with the branch of the Southern Pacific Railroad that was identified in the 1896 quadrangle located to the east and south of the site. The 1942 quadrangle also identified that the City of Orange had expanded within the 1-mile search radius of the project area. Numerous buildings and a dense street grid pattern were visible within the city. Power transmission lines had also been built throughout the 1-mile search radius of the project area.

Based upon a review of the National Register of Historic Places, the California State Historic Resources Inventory, the listing of California Historical Landmarks, and the California Points of Historical Interest, no properties were identified within a 1-mile radius of the project site.

Archaeological Resources

Based upon a review of all known cultural resource surveys and excavation reports, nine surveys and/or excavations have been conducted within a 1-mile radius of the project site. A survey transect (Survey O-270) extends through the project area but is not found to occur on the project site. Additionally, there were no significant archaeological resources found within the transect area.

5.11.2 ENVIRONMENTAL IMPACTS

Thresholds of Significance

Under the provisions and guidelines of Appendix J, Section III, of CEQA, if a proposed "project may cause damage to an important archaeological resource, the project may have a significant effect on the environment." That is, before impacts or mitigation of impacts can be addressed, site importance must be determined. CEQA, Appendix J, recommends a testing program to determine if a site may qualify as an important resource under CEQA. The goals of a testing program are to determine if a subsurface component is present, whether the areal extent of surface and/or subsurface materials may be affected by the proposed action, and if the resources in question have the potential to answer local and regional research questions. If a resource is determined to be important, a program to mitigate anticipated impacts must be implemented through avoidance or data recovery. Sites found not to contain important cultural resources need not be addressed under CEQA.

Impacts on prehistoric resources are considered significant if a project may cause damage to an important prehistoric resource. Historical resources are considered to be significantly affected if a structure is or potentially is a designated historic resource.

Project Impacts

Past surveys have not uncovered any prehistoric, historic, or archaeological resources according to the archaeological records search; therefore, development of the Anaheim Sports Center site is not expected to result in any direct impacts. In addition, development of specific projects within the project area is not anticipated to uncover any prehistoric, historic, or archaeological resources. Therefore, no impacts on cultural resources are anticipated from the development of the proposed project.

5.11.3 CUMULATIVE IMPACTS

Because of the currently urban nature of the area, no known cultural resources are expected to occur on the project site or surrounding area, or at any of the related project sites. Therefore development of the Anaheim Sports Center site, along with the related projects in the surrounding area, is not anticipated to contribute to a potential cumulative impact on cultural resources.

5.11.4 MITIGATION MEASURES

No impacts on cultural, historic, or prehistoric resources are anticipated; however, the following mitigation measures will be required for development within the Anaheim Sports Center site to minimize potential disturbance to any as yet undiscovered resources that may be encountered during construction activity.

Mitigation Measure 11-1. Prior to approval of a grading plan, the property owner/developer shall submit a letter to the Public Works/Engineering Department, Development Division, and the Planning Department, Planning Division, identifying the certified archaeologist that has been hired to ensure that the following actions are implemented:

- a. The archaeologist must be present at the pregrading conference in order to establish procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of artifacts if potentially significant artifacts are uncovered. If artifacts are uncovered and determined to be significant, the archaeological observer shall determine appropriate actions in cooperation with the property owner/developer for exploration and/or salvage.

- b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.
- c. Any archaeological work at the site shall be conducted under the direction of the certified archaeologist. If any artifacts are discovered during grading operations when the archaeological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.
- d. A final report detailing the findings and disposition of the specimens shall be submitted to the City Engineer. Upon completion of the grading, the archaeologist shall notify the City to when the final report will be submitted.

Mitigation Measure 11-2. Prior to approval of a grading plan, the property owner/developer shall submit a letter to the Public Works/Engineering Department, Development Division, and the Planning Department, Planning Division, identifying the certified paleontologist that has been hired to ensure that the following actions are implemented:

- a. The paleontologist must be present at the pregrading conference in order to establish procedures to temporarily halt or redirect work to permit the sampling, identification, and evaluation of fossils if potentially significant paleontological resources are uncovered. If artifacts are uncovered and found to be significant, the paleontological observer shall determine appropriate actions in cooperation with the property owner/developer for exploration and/or salvage.
- b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.
- c. Any paleontological work at the site shall be conducted under the direction of the certified paleontologist. If any fossils are discovered during grading operations when the paleontological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.
- d. A final report detailing the findings and disposition of the specimens shall be submitted. Upon completion of the grading, the paleontologist shall notify the City as to when the final report will be submitted.

5.11.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

Because no known cultural resources have been identified in the study area, no adverse impacts are anticipated. However, incorporation of the mitigation measures listed above will ensure potential indirect impacts of the project are mitigated to a less than significant level if any cultural resources are discovered during grading or development of the Anaheim Sports Center site.

SECTION 6

ALTERNATIVES TO THE PROPOSED PROJECT

Section 15126(d)(2) of the state CEQA Guidelines, as amended, mandates that an EIR include a comparative evaluation of the proposed project with alternatives to the project, including the No Project. As described in Section 3, Project Description, the proposed project is the implementation of the Anaheim Sports Center. This section focuses on alternatives to the proposed project capable of avoiding or substantially lessening any significant adverse impact associated with the proposed project even if these alternatives would impede to some degree the attainment of project objectives or be more costly. Additionally, alternatives are discussed in the terms of achieving project objectives (see Section 3, Project Description, of this EIR).

The EIR has focused on the direct and indirect effects on the environment which will result from implementation of the proposed project. Direct environmental impacts of the project are expected related to air quality; noise; hydrology and water quality; public services, utilities, and energy consumption (solid waste, water demand, etc.). All direct impacts can be mitigated to a level that is considered less than significant with the exception of those associated with air quality and solid waste.

The project-related alternatives evaluated in this section are the following:

- No Project Alternative
- Design Alternative 1: Reduced Density Alternative
- Design Alternative 2: Residential Alternative

The Environmentally Superior Alternative will be selected from among these alternatives and the proposed project. An alternative that is environmentally superior will result in the fewest or least significant environmental impacts and will achieve the objectives of the planning effort. Based on the evaluation of the three alternatives in this section, implementation of the Reduced Density Alternative would result in fewer significant impacts than the proposed project. While this alternative is determined to be environmentally superior than the proposed project it would not meet the objectives for the proposed project at the scale in which it is proposed; therefore, this alternative is not proposed as the project.

The analysis of alternatives includes the assumption that all applicable mitigation measures associated with the project will be implemented with the appropriate alternatives. However, applicable mitigation measures may be scaled to reduce or avoid the potential impacts of the alternative under consideration, and may not precisely match those identified for the proposed project. If a specific impact is not

raised within the discussion of an alternative, it is because the impact is expected to be the same as that associated with the implementation of the proposed project.

A description of each alternative and a comparative environmental evaluation to the identified impacts of the Anaheim Sports Center project is provided below.

6.1 NO PROJECT ALTERNATIVE

6.1.1 DESCRIPTION

The No Project Alternative assumes that future development of the proposed Anaheim Sports Center site would occur under the assumptions established in the City of Anaheim General Plan. The current General Plan Land Use designations for the site are Commercial Recreation and Business Office/Service/Industrial. A previously entitled project, Orangewood Site Master Plan, would have allowed an additional 2,118,480 square feet square feet of commercial/office space, accessory retail and four parking structures (2,587,000 square feet) to be developed in the southern portion of the site along Orangewood Avenue, as described in the Anaheim Stadium Center Final EIR. The remainder of the site would continue in its current use (Anaheim Stadium, parking, commercial/office professional uses).

6.1.2 IMPACT EVALUATION

Implementation of the No Project Alternative is expected to result in similar or greater environmental effects, related to all environmental issues, in comparison to the proposed project. This alternative assessment is based on the implementation of 2,118,480 square feet of office/professional and retail space compared to 2,200,000 million square feet of entertainment/retail, office/professional/, and hotel space to be constructed under the project. This alternative is also assumed to have less construction related impacts than that of the proposed project due to the elimination of the renovation of the existing stadium and construction of a new stadium. Additionally, since there is more office/professional space proposed under this alternative, more primary wage earners would be generated than under the proposed project. This would result in a greater number of employees requiring housing within the City; thereby creating a greater indirect impact on the City's housing stock and schools facilities. Overall, project-specific and cumulative effects associated with implementation of this alternative would be similar or greater than the proposed project, particularly with respect to population and housing; public services, utilities, and energy consumption; and aesthetics.

6.1.3 CONCLUSIONS

Overall, this alternative would result in similar or greater environmental impacts than the proposed project. Therefore, the No Project Alternative is not considered environmentally superior. In addition, the No Project Alternative does not meet the City's objectives for the Anaheim Sports Center including, but not limited to:

- Enhance the City sports venues to maintain existing tenant relationships and attract additional professional sports teams and other major events.
- Develop an entertainment/recreation area for the local and regional residents, while also providing entertainment opportunities for convention visitors and tourists from out of the area.
- Provide a variety of venues for entertainment at one location, with an emphasis on pre- and post-game retail and entertainment opportunities.
- Encourage and enhance Anaheim's and the County of Orange's position as a nationally recognized visitor destination, while maintaining the attraction of Anaheim's highly rated Convention Center.
- Encourage the development of quality facilities which complement conventions, family entertainment, sports events, and other recreational opportunities within appropriate areas of the community.

6.2 DESIGN ALTERNATIVE 1: REDUCED DENSITY ALTERNATIVE

6.2.1 DESCRIPTION

The reduced density alternative allows for the development of a new 45,000-seat baseball stadium or a new 70,500-seat football stadium and renovated 45,000-seat Anaheim Stadium to be used solely for baseball, 300,000 square feet of retail/entertainment, two hotels (500 rooms), 100,000 square feet of exhibition space, 900,000 square feet of office space, and 16,000 onsite parking spaces. This alternative provides for a reduction of approximately 450,000 square feet in retail/entertainment uses, in addition to reducing the amount of exhibition space currently onsite by 50,000 square feet. However, this alternative would provide approximately 2,000 more parking spaces onsite than what would occur under the project. The addition of these spaces, would reduce the need for a shuttle to carry visitors from offsite parking locations to the site; thereby, decreasing the amount of traffic on the surrounding circulation system during event times. The general intent of this alternative is to reduce the overall impact of the development of the site, while still creating a feasible alternative to the project.

6.2.2 IMPACT EVALUATION

Land Use and Related Plans and Policies

Existing land use plans and policy impacts would be similar to those identified in the analysis of the proposed Anaheim Sports Center. Mitigation measures identified for the Anaheim Sports Center would be implemented under this alternative and would reduce impacts on related plans and policies to below a level of significance.

This alternative would provide land uses similar to those of the proposed project, but would result in approximately 450,000 less square feet of retail/entertainment and a reduction of exhibition space over what is currently onsite by 50,000 square feet. Although the square footage would be reduced, land use compatibility would be comparable to those identified for the proposed project. Mitigation measures similar to those for the proposed project (review of site plans, etc.) would be included in this alternative.

Transportation and Circulation

The project is not expected to result in any significant impacts on traffic and circulation in the short-(Year 2000) or long-term (Year 2010). However, the effects on traffic under the Reduced Density Alternative would be less than that of the proposed project. In the a.m. peak hour, this alternative generates 2,544 trips, 13 percent less than the proposed project. During the p.m. peak hour, the Reduced Density Alternative would generate 32 percent less than the proposed project's trips. Although, the Reduced Density Alternative is considered to have less overall impacts on traffic and circulation than the proposed project, mitigation measures proposed for the Anaheim Sports Center would reduce these impacts to below a significant level.

Air Quality

Implementation of this alternative would have air quality impacts less than, but similar to those associated with the proposed project. More specifically, this alternative would have short-term construction impacts similar to those associated with the proposed project as it relates to PM10. Moreover, operational emissions (long-term) of CO, NO, and ROC will exceed significance thresholds established by the SCAQMD under this alternative and the proposed project. This alternative would be consistent with the Regional Growth Management Plan and the 1991 Air Quality Management Plan. Mitigation measures for the project would be included under this alternative; however, significant unavoidable adverse air quality impacts would occur under both development scenarios.

Noise

Under the Reduced Density Alternative, noise from vehicle trips would be reduced in comparison to noise levels identified with the proposed project. The proposed reduction in the amount of office/professional and exhibition space onsite would incrementally reduce the project-related traffic and, therefore, will slightly reduce traffic noise. Neither noise levels from the proposed project nor this alternative would be significant. The mitigation measures, as identified for the proposed project, would be required for this alternative. Refer to Section 5.4, Noise, for a detailed discussion.

Earth Resources

Impacts associated with geology and soils would be comparable to those identified for the proposed project including groundshaking and seismic activity. Although no significant impacts on earth resources are expected, mitigation measures comparable to those recommended for the proposed project would be incorporated into this alternative to minimize any impacts that may occur. Refer to Section 5.5, Earth Resources, for a detailed discussion.

Hydrology and Water Quality

Implementation of this alternative would have impacts similar to those identified for the proposed project. Although no significant hydrology and water quality impacts are expected, mitigation measures similar to those identified for the proposed project would be incorporated into this alternative to minimize any impacts that may occur. Refer to Section 5.6, Hydrology and Water Quality, for a detailed discussion.

Employment, Population, and Housing

This alternative would produce fewer jobs than that of the proposed project and a lower proportion of part-time jobs because of the decrease in retail and entertainment-type uses. The number and pattern of indirect and induced employment would, therefore, also be substantially different. Due to the types of jobs (part-time) eliminated, as with the proposed project, this alternative would produce no significant impacts on employment. Due to the decreased number of employees, demand for housing would be less than what would occur under the proposed project but would not be significantly changed, as with the proposed project. Resulting impacts on population would also be insignificant. Additionally, fewer number of jobs associated with this alternative would result in slightly lower VMT impacts and therefore, slightly greater VMT saving than the proposed project.

Public Services, Utilities, and Energy Consumption

The reduction in the number of retail/entertainment and exhibition space onsite would reduce impacts on police and fire services. Schools would be affected indirectly as with the proposed project. Significant and indirect impacts to schools would be associated with this alternative. This alternative would also incrementally reduce utility and energy consumption impacts, as with the proposed project. No significant adverse impacts on public services, utilities, and energy consumption would occur after mitigation, with the exception of impacts to schools and landfills, similar to that of the proposed project, although reduced to reflect this alternative. Similar mitigation measures would be required to those of the proposed project resulting in reduced consumption and demand for public services which would reduce impacts to level of less than significant.

Hazardous Materials Compliance

Impacts would be equivalent to those associated with the proposed project because the study area for hazardous materials is the same area in which a search was conducted for potential and/or known hazardous contamination sites within a 0.25-radius of the project, regardless of the density and/or intensity of development activity. Implementation of the mitigation measures identified for the proposed project would be included in this alternative. (Refer to Section 5.9, Hazardous Materials Compliance, for a detailed discussion).

Aesthetics

The implementation of the Reduced Density Alternative, would result in the development of the same types of urban uses as would the proposed project, but modified to reflect the scale of this alternative. Implementation of this alternative would be guided by the development standards, landscape, design, and setback standards to be established for the Anaheim Sports Center. This alternative, as with the proposed project, is not expected to result in any significant aesthetic impacts. Refer to Section 5.10, Aesthetics, for a detailed discussion.

Cultural Resources

No significant impacts are anticipated because no cultural resources have been found on the project site. Further, mitigation measures included in the project would be incorporated into this alternative. Refer to Section 5.11, Cultural Resources, for a detailed discussion.

6.2.3 CONCLUSIONS

The potential impacts to land use and related plans and policies; earth resources (i.e., geology, soils, and seismicity); hydrology and water quality; hazardous materials; aesthetics; and cultural resources would be comparable to the proposed project. However, impacts to transportation/circulation; air quality; noise; and population, employment and housing opportunities; and public services, utilities, and energy consumption would be generally less than the proposed project.

6.3 DESIGN ALTERNATIVE 2: RESIDENTIAL ALTERNATIVE

6.3.1 DESCRIPTION

The residential alternative would eliminate approximately 450,000 square feet of office/professional space and allow for the development of 360 apartment/condominium type units. The additional residences would be located in place of one of the office towers proposed for the Anaheim Sports Center in the northern portion of the site. The intent of this alternative would be to reduce air quality and socioeconomic impacts associated with the proposed project which will decrease the amount of vehicle miles travelled and vehicle trips generated by those employees that would commute from other areas of the County to work onsite. This alternative assumes all other uses proposed under the project would be implemented (e.g., new stadium, hotels, exhibition space, etc.), in addition to the development of 14,000 onsite parking spaces.

6.3.2 IMPACT EVALUATION

Land Use and Related Plans and Policies

Existing land use plans and policy impacts would be similar to those identified in the analysis of the proposed Anaheim Sports Center. Moreover, this alternative would be consistent with the goals and policies of the City's Housing Element. Mitigation measures identified for the Anaheim Sports Center would be implemented under this alternative and would reduce impacts on related plans and policies to below a level of significance.

For the most part, this alternative would provide land uses similar to those associated with the proposed project, but would result in approximately 450,000 less square feet of office/professional space to be replaced with 360 apartment/condominium-style dwelling units. These units would be located in place of the office towers that is previously proposed for the Anaheim Sports Center in the northern portion of the site. Although new residential uses would be introduced onsite, the overall

square footage would be the same and land use compatibility would be comparable to the proposed project due to the complimentary urban (high-rise) nature of the dwelling units proposed under this alternative. Mitigation measures similar to those for the proposed project (review of site plans, etc.) would be included in this alternative.

Transportation and Circulation

The project is not expected to result in any significant impacts on traffic and circulation in the short (Year 2000) or long-term (Year 2010). However, the effects on traffic under the Residential Alternative would be less than that of the proposed project because overall trips would be reduced by way of residences finding employment onsite; thereby, reducing traffic on the surrounding circulation system during commute times (a.m. and p.m. peak hour) when traffic is heaviest. More specifically, this alternative in the AM peak hour, generates 2,245 trips, 23 percent less than the proposed project's AM peak hour trip generation. During the p.m. peak hour, the Residential Alternative would generate 12 percent less than the proposed project's trips. Although, the Residential Alternative is considered to have less overall impacts on traffic and circulation than the proposed project, mitigation measures proposed for the Anaheim Sports Center would reduce these impacts to below a level considered less than significant.

Air Quality

Due to the reduction in the number of vehicle trips generated, this alternative would have air quality impacts less than, but similar to those associated with the proposed project. More specifically, implementation of this alternative would have short-term construction impacts similar to those associated with the proposed project as it relates to PM10. Moreover, operational emissions (long-term) of CO, NO, and ROC will exceed significance thresholds established by the SCAQMD under this alternative and the proposed project. This alternative would be consistent with the Regional Growth Management Plan and the 1991 Air Quality Management Plan. Mitigation measures for the project would be included under this alternative; however, significant unavoidable adverse air quality impacts would occur with both development scenarios.

Noise

Under the Residential Alternative, noise from vehicle trips would be reduced in comparison to noise levels identified with the proposed project. The proposed reduction in the amount of project-related traffic will result in a slight reduction in traffic noise. Neither noise levels from the proposed project

nor this alternative would be significant. The mitigation measures, as identified for the proposed project, would be required for this alternative. Refer to Section 5.4, Noise, for a detailed discussion.

Earth Resources

Impacts associated with geology and soils would be comparable to those identified for the proposed project. Impacts associated with groundshaking and seismic activity would be the same as for the proposed project. Although no significant impacts on earth resources are expected, mitigation measures comparable to those recommended for the proposed project would be incorporated into this alternative to minimize any impacts that may occur. Refer to Section 5.5, Earth Resources, for a detailed discussion.

Hydrology and Water Quality

Implementation of this alternative would have impacts similar to those identified for the proposed project. Although no significant hydrology and water quality impacts are expected, mitigation measures similar to those identified for the proposed project would be incorporated into this alternative to minimize any impacts that may occur. Refer to Section 5.6, Hydrology and Water Quality, for a detailed discussion.

Employment, Population, and Housing

This alternative would result in fewer jobs created than the proposed project and a lower proportion of full-time positions because of the decrease in office/professional space. The number and pattern of direct and induced employment would be substantially different. Therefore, unlike the proposed project, this alternative is expected to produce a greater impact on employment opportunities. Conversely, the reduction in employment would decrease the demand for housing but, as with the proposed project, would not be a significant impact. With fewer number of jobs on the project site under this alternative, there would be a decrease in VMT.

Public Services, Utilities, and Energy Consumption

The replacement of office/professional space onsite with residential uses would increase the need for fire and police protection services, thereby resulting in a greater impact. Under the proposed project, a portion of the employees generated under the proposed project would occupy existing housing stock within the City, of which the school districts have accounted for in their existing capacity and budget projections. Conversely, development of residential uses under this alternative would result in the

direct need for additional school facilities as a result of new housing units. Therefore, this alternative would have a substantially greater impact on schools than that of the proposed project. This alternative would also incrementally increase utility and energy consumption impacts. However, no significant adverse impacts on public services, utilities, and energy consumption would occur after mitigation, with the exception of impacts to schools and landfills, similar to that of the proposed project, although increased to reflect this alternative. Similar mitigation measures would be required to those of the proposed project resulting in reduced consumption and demand for public services which would reduce impacts to level of less than significant.

Hazardous Materials Compliance

Impacts would be equivalent to those associated with the proposed project because the study area for hazardous materials is the same area in which a search was conducted for potential and/or known hazardous contamination sites within a 0.25-radius of the project, regardless of the density and/or intensity of development activity. Implementation of the mitigation measures identified for the proposed project would be included in this alternative. Refer to Section 5.9, Hazardous Materials Compliance, for a detailed discussion.

Aesthetics

The implementation of the Residential Alternative, would result in the development of relatively the same types of urban uses as with the proposed project, but modified to reflect the introduction of high-rise apartment/condominium-style residential units. Implementation of this alternative would be guided by the development standards, landscape, design, and setback standards to be established for the Anaheim Sports Center. This alternative, as with the proposed project, is not expected to result in any significant aesthetic impacts. (Refer to Section 5.10, Aesthetics, for detailed discussion).

Cultural Resources

No significant impact are anticipated because no cultural resources have been found on the project site. Further, mitigation measures included in the project would be incorporated into this alternative. (Refer to Section 5.11, Cultural Resources, for a detailed discussion).

6.3.3 CONCLUSIONS

The potential impacts to land use and related plans and policies; earth resources (i.e., geology, soils, and seismicity); hydrology and water quality; population, employment and housing opportunities; hazardous materials; aesthetics; and cultural resources would be comparable to the proposed project, while impacts to transportation/circulation; air quality; and noise would be generally less than the proposed project. However, implementation of the Residential Alternative would result in greater impacts to public services, utilities, and energy consumption.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an Environmentally Superior Alternative be identified; that is, an alternative that would result in the fewest or least significant environmental impacts. The No Project Alternative would induce impacts associated with development of the project site under the current General Plan designations for the sites. Some environmental effects such as land use; public services, utilities, and energy consumption; and aesthetics could potentially be greater with the implementation of No Project Alternative. Further, the No Project Alternative is not capable of satisfying the City's objectives as described earlier in Section 6.1.3.

The Reduced Density Alternative would be the most environmentally superior alternative analyzed. This alternative would have similar impacts to land use and related plans and policies; earth resources; hydrology and water quality; hazardous materials; aesthetics; and cultural resources. Implementation of this alternative would also result in reduced impacts to transportation and circulation; air quality; noise; employment, population, and housing; and public services, utilities, and energy consumption. However, this alternative is not capable of eliminating any significant adverse effects associated with the project, nor will it reduce the level of significance of any of the identified environmental impacts, without incorporating the same mitigation measures that are proposed as part of the project. Moreover, the objectives of the project would not be met by this alternative at the scale proposed.

SECTION 7 OTHER LONG-TERM CONSIDERATIONS

7.1 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTIONS

This section of the EIR analyzes the potential environmental consequences of the foreseeable growth and development in the surrounding area that would be caused by implementation of the proposed project.

To a great extent, the potential growth that may be induced by implementation of the proposed Anaheim Sports Center is discussed under the "Cumulative Impact" section within the individual environmental issue areas which are addressed in Section 5 of this EIR. Therefore, where appropriate, the following discussion summarizes the relevant analysis and provides cross-references to guide the reader to environmental analyses located elsewhere in the EIR.

As described below, implementation of the Anaheim Sports Center project may induce growth of various kinds, including economic growth in the City of Anaheim, new construction and other jobs in the region, and population growth in the Southern California region.

It is anticipated that the project site and surrounding area will experience substantial economic growth in the future as a direct result of development of the Anaheim Sports Center and other projects in the area, such as future Convention Center expansion programs, and implementation of the recently approved Disneyland Resort and Anaheim Resort Specific Plans. The intent of the proposed Anaheim Sports Center will be to integrate commercial recreation land uses, including urban/retail-entertainment, hotels, recreation, and other tourist/visitor-support services and facilities. If adopted, the plan for the project would allow commercial growth consistent with the plan to revitalize the area, enhance the economic base of the City, and increase local employment opportunities.

The growth that may occur in the foreseeable future (through 2010) in the area surrounding the proposed project is described in Section 4, Environmental Setting, of this EIR. Growth anticipated within the area of the Anaheim Sports Center would be compatible with the types of land uses allowed in project area. Therefore, although the proposed Anaheim Sports Center plan is anticipated to induce development of this site with a new baseball stadium and complementary uses such as retail/entertainment, office, exhibition, and hotels, the growth would be consistent with the growth projections for the area.

Development onsite would directly create a number of new employment opportunities in the City of Anaheim and the surrounding area. Construction jobs in Anaheim and throughout the region would be created as a direct result of the project. Jobs associated with the operation of the newly developed uses within the Anaheim Sports Center would also be created as the project area develops. In addition, other jobs, in a wide variety of sectors of the local and regional economies would be indirectly induced as a result of project implementation. The numbers of construction and other related jobs which would be generated by the project cannot be accurately calculated at this state of project development; however, influence of the proposed project on the job market is not expected to generate significant growth beyond the growth assumed in regional plans. Estimates of projected jobs created through development of the Anaheim Sports Center are included in Table 5.7-11, in Section 5.7, Employment, Population, and Housing.

As discussed in Section 5.7, Employment, Population, and Housing, of this EIR, considering both in-migrating and intraregional relocation, it is estimated that approximately 550 employees (1,708 new residents at 3.1 persons per household) will seek housing in Anaheim as a result of employment at the Anaheim Sports Center. These people would comprise approximately 2.0 percent of the 2010 population forecast projected for the City.

The project could also indirectly induce effects on population elsewhere within the region. Therefore, the potential demand for public services and utilities that would be generated by this induced population growth would be well within the forecasted growth and infrastructure improvements in local and regional plans, including public service plans to accommodate forecasted growth.

As discussed in Section 5.7, Employment, Population, and Housing, of this EIR, it is anticipated that the jobs indirectly induced by the project would in turn induce demand for additional housing units within the region. However, it is infeasible to calculate the size of households, wage earner status, and the choice of housing location of the employees that may be indirectly induced by the implementation of the proposed project. Because the proposed project and the potential growth that would be indirectly induced by implementation of the proposed project are well within the local and regional growth forecasts as described in Section 3.1, Land Use and Related Planning Programs, and Section 5.7, Employment, Population, and Housing, of this EIR, it is anticipated that the indirect effects associated with the provision of housing would also be within these forecasts.

It is possible that certain aspects of the proposed project would remove barriers to growth for new uses or expansion of existing uses in the surrounding area. For example, implementation of the proposed project will provide for certain public infrastructure improvements that may provide capacity in excess of the current demand. The additional capacity may be provided to adequately serve the

reasonably anticipated growth within the service or study areas, as discussed in Section 4, General Description of Environmental Setting, of this EIR.

The growth that may be induced by implementation of the proposed project is anticipated to be only a portion of the buildup of the project currently under consideration and/or review for the surrounding area and is consistent with adopted growth projections for the region. Thus, analysis of the cumulative effects of the proposed project plus the development of the surrounding area substitutes the potential environmental impacts associated with the growth that may be induced by the proposed project. Rather than repeating the detailed analysis of cumulative impacts, the reader is referred to the "Cumulative Impact" discussion found within the individual environmental issue areas analyzed in Section 5 of this EIR.

7.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES THAT WOULD BE INVOLVED IF THE PROPOSED ACTION IS IMPLEMENTED

The environmental effects of the proposed project are discussed in Section 5 and summarized in Section 2, Executive Summary, of this EIR. Implementation of the proposed project would require the long-term commitment of natural resources and land, as discussed below.

Approval and implementation of action related to the implementation of the Anaheim Sports Center would result in an irretrievable commitment of nonrenewable resources such as energy supplies and other construction-related resources. These energy resource demands would be used for construction, heating and cooling of buildings, transportation of people and goods to and from the project site, heating and refrigeration for food preparation and water, as well as lighting and other associated energy needs.

As fossil fuels currently are the principal source of energy, it can be stated that implementation of the development project within the Anaheim Sports Center site will directly reduce existing supplies of fuels, including fuel oil, natural gas, and gasoline. It has been forecast that the proposed project would consume 4,241,300 kWh of electricity, 87,182 MBTU of natural gas annually, and additional vehicular fuel. This represents a long-term commitment to consumption of an essentially nonrenewable resource.

The implementation of the proposed Anaheim Sports Center would require the commitment or destruction of other nonrenewable or slowly renewable resources. These resources include, but are not limited to, lumber and other forest products; sand and gravel; asphalt; petrochemical construction

materials; steel; copper; lead and other metals, water, etc. An increased commitment of public maintenance services (waste disposal and treatment, etc.) would also occur.

SECTION 8

COMPILATION OF MITIGATION MEASURES

LAND USE AND RELATED PLANNING PROGRAMS

No mitigation required.

TRANSPORTATION AND CIRCULATION

Construction

Mitigation Measure 2-1. Prior to the issuance of grading permits for each project development forecast to generate 100 or more peak hour trips, as determined by the City Traffic and Transportation Manager utilizing Anaheim Traffic Analysis Model Trip Generation Rates, the property owner/developer shall prepare a trip reduction plan for construction crew vehicles subject to the review and approval of the City Traffic and Transportation Manager, to reduce potential vehicle trips on the road and identify parking locations for construction employees and equipment.

Long-Term

Although no long-term project traffic impacts are identified, the following measure will help reduce the trips to and from the project site.

Mitigation Measure 2-2. Prior to final building and zoning inspection; and, ongoing during project operation, the property owner/developer shall implement and administer a comprehensive Transportation Demand Management (TDM) program for all employees. Objectives of the TDM program shall be to increase ridesharing and use of alternative transportation modes by guests and provide a menu of commute alternatives for employees to reduce project-generated trips.

A menu of TDM program strategies and elements for both existing and future employee commute options include, but are not limited to, the following:

- **Onsite Service.** Onsite services, such as the food, retail, and other services be provided.

- Ridesharing. A computer listing of all employee members be developed for the purpose of providing a "matching" of employees with other employees who live in the same geographic areas and who could rideshare.
- Vanpooling. A computer listing of all employees for the purpose of matching numbers of employees who live in geographic proximity to one another and could comprise a vanpool or participate in the existing vanpool programs.
- Transit Pass. Southern California Rapid Transit District and Orange County Transportation Authority (including commute rail) passes be promoted through financial assistance and onsite sales to encourage employees to use the various transit and bus services from throughout the region.
- Commuter Bus. As commuter "express" bus service expands throughout the region, passes for use on these lines may be provided for employees who choose to use this service. Financial incentives for these employees could be provided.
- Shuttle Service. A computer listing of all employees living in proximity to the project be generated, and a local shuttle program offered to encourage employees to travel to work by means other than the automobile. Event shuttle service will be available for the guests.
- Bicycling. A bicycling program be developed to offer a bicycling alternative to employees. Secure bicycle racks, lockers, and showers be provided as part of this program. Maps of bicycle routes throughout the area be provided to inform potential bicyclists of these options. Bicycle lanes will be provided along the internal ring road.
- Rental Car Fleet. A private "fleet vehicle" program be developed to provide employees who travel to work by means other than an automobile with access to automobiles in case of emergency, medical appointments, etc. This service would help employees use alternative modes of transportation by ensuring that they would be able to have personal transportation in the event of special circumstances.
- Guaranteed Ride Home Program. A program to provide employees who rideshare, or use transit or other means of commuting to work, with a prearranged ride home in a taxi, rental car, shuttle, or other vehicle, in the event of emergencies during the work shift.
- Target Reduction of Longest Commute Trip. An incentives program for ridesharing and other alternative transportation modes to put highest priority on reduction of longest employee commute trips.
- Stagger shifts.
- Develop a "compressed work week" program, which provides for fewer work days but longer daily shifts as an option for employees.

- Explore the possibility of a "telecommuting" program that would link some employees via electronic means (e.g., computer with modem).
- Develop a parking management program that provides incentives to those who rideshare or use transit means other than single-occupant auto to travel to work.
- Access. Preferential access to high occupancy vehicles, shuttles, and guests for egress purposes may be provided.
- Financial Incentive for Ridesharing and/or Public Transit. (Currently, federal law provides tax-free status for up to \$60 per month per employee contributions to employees who vanpool or use public transit, including commuter rail and/or express bus pools.)
- Financial Incentive for Bicycling. Employees offered financial incentives for bicycle to work.
- Special "Premium" for the Participation and Promotion of Trip Reduction. Ticket/passes to special events, vacations, etc. be offered to employees who recruit other employees for vanpool, carpool, or other trip reduction programs.
- Actively recruit prospective employees residing within a 30-minute commute shed.
- Design incentive program for carpooling and other alternative transportation modes so as to put highest priority on reduction of longest commute trips.

Mitigation Measure 2-3. Prior to final building and zoning inspections, the property owner/developer shall join and financially participate in a clean fuel shuttle program, if established; and, shall participate in the Anaheim Transportation Network/Transportation Management Association in conjunction with the ongoing operation of the project.

Mitigation Measure 2-4. Prior to the issuance of the first building permit, appropriate Traffic Signal Assessment Fees and Traffic Impact and Improvements Fees shall be paid by the property/owner/developer to the City of Anaheim for signalization of the project's Katella Avenue entrance. The amount of payment will be determined by the City Council resolution in effect at the time of issuance of the building permit.

Mitigation Measure 2-5. Prior to the approval of each building permit, preparation of a new and/or revisions to existing parking and/or event management plans shall be submitted to the City Traffic and Transportation Manager for review and approval to ensure adequate parking and event management strategies (parking layouts, shuttle routes, shuttle-stop locations, etc.) are in place.

Mitigation Measure 2-6. Prior to the issuance of the first building permit, the property owner/developer shall prepare, for approval by the City Traffic and Transportation Manager, a parking plan which, if offsite parking spaces are needed to meet peak demand, will include signed shared parking agreements with offsite parking lot/structure owners. In addition, prior to each additional building permit, the property owner/developer will revise the parking plan to the satisfaction of the City Traffic and Transportation Manager.

AIR QUALITY

Mitigation Measure 3-1. Ongoing during construction, the property owner/developer shall implement measures to reduce construction-related air quality impacts. These measures shall include, but are not limited, to:

- a. Normal wetting procedures (at least twice daily) or other dust palliative measures shall be followed during earth-moving operations to minimize fugitive dust emissions, in compliance with the City of Anaheim Municipal Code including application of chemical soil stabilizers to exposed soils after grading is completed and replacing ground cover in disturbed areas as quickly as practicable.
- b. Enclosing, covering, watering twice daily, or applying approved soil binders, according to manufacturer's specification, to exposed stock piles.
- c. Roadways adjacent to the project shall be swept and cleared of any spilled export materials at least twice a day to assist in minimizing fugitive dust; and, haul routes shall be cleared as needed if spills of materials exported from the project site occur.
- d. Where practicable, heavy duty construction equipment shall be kept onsite when not in operation to minimize exhaust emissions associated with vehicles repetitiously entering and exiting the project site.
- e. Trucks importing or exporting soil material and/or debris shall be covered prior to entering public streets.
- f. Taking preventive measures to ensure that trucks do not carry dirt on tires onto public streets, including treating onsite roads and staging areas.
- g. Preventing trucks from idling for longer than 2 minutes.
- h. Manually irrigate or activate irrigation systems necessary to water and maintain the vegetation as soon as planting is completed.
- i. Reduce traffic speeds on all unpaved road surfaces to 15 miles per hour or less.

- j. Suspend all grading operations when wind speeds (as instantaneous gust) exceed 25 miles per hour and during first and second stage smog alerts.
- k. Comply with the SCAQMD Rule 402, which states that no dust impacts offsite are sufficient to be called a nuisance, and SCAQMD Rule 403, which restricts visible emissions from construction.
- l. Use low emission mobile construction equipment (e.g., tractors, scrapers, dozers, etc.) where practicable.
- m. Utilize existing power sources (e.g., power poles) or clean-fuel generators rather than temporary power generators, where practicable.
- n. Maintain construction equipment engines by keeping them properly tuned.
- o. Use low sulfur fuel for equipment, to the extent practicable.

Mitigation Measure 3-2. Prior to approval of each grading plan (for Import/Export Plan) and prior to issuance of demolition permit (for Demolition Plan), the property owner/developer shall submit Demolition and Import/Export Plans. The plans shall include identification of offsite locations for materials export from the project and options for disposal of excess material. These options may include recycling of materials onsite, sale to a soil broker or contractor, sale to a project in the vicinity or transport to an environmentally cleared landfill, with attempts made to move it within Orange County. The property owner/developer shall offer recyclable building materials, such as asphalt or concrete for sale or removal by private firms or public agencies for use in construction of other projects, if not all can be reused on project site.

Mitigation Measure 3-3. Prior to the issuance of each building permit, the property owner/developer shall submit evidence that low emission paints and coatings are utilized in the design and construction of buildings, in compliance with SCAQMD regulations. This information shall be denoted on the project plans and specifications. The property owner/developer shall also implement the following to limit emissions from architectural coatings and asphalt usage: (1) use nonsolvent-based coatings on buildings, wherever appropriate; (2) use solvent-based coatings where they are needed in ways that minimize element emissions; and (3) encourage use of high-solid or water-based coatings.

Mitigation Measure 3-4. Ongoing during project operation, the property owner/developer shall implement measures to reduce emissions to the extent practical, schedule goods movements for off-peak traffic hours, and use clean fuel for vehicles and other equipment, as practicable. The TDM

programs and services documented in Section 5.2-4 shall be implemented for both employees and guests of the Anaheim Sports Center.

NOISE

Mitigation Measure 4-1. During demolition, grading, and construction, noise generated by construction activity shall be limited by the property owner/developer to 60 dBA along the property boundaries, before 7 a.m. and after 7 p.m., as governed by Chapter 6.7, Sound Pressure Level, of the Anaheim Municipal Code.

Mitigation Measure 4-2. During construction, the property owner/developer shall ensure that all internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers.

Mitigation Measure 4-3. Prior to issuance of building permits for the new stadium, building plans for the facility shall be reviewed by a certified acoustical engineer to ensure that noise from the facility does not exceed the noise levels established by the City of Anaheim Sound Pressure Level Ordinance. Compliance with said ordinance shall be to the satisfaction of the Chief Building Official.

EARTH RESOURCES

Mitigation Measure 5-1. Prior to approval of a grading plan, the property owner/developer shall submit to the City Engineer for review and approval, a soils and geological report for the area to be graded, based on proposed grading. The report shall be prepared by an engineering geologist and geotechnical engineer. All grading shall be in conformance with Title 17 of the City of Anaheim Municipal Code.

Mitigation Measure 5-2. Prior to the issuance of each building permit, the property owner/developer shall submit for review and approval, detailed foundation design information for the proposed buildings, prepared by a civil engineer, based on recommendations by a geotechnical engineer.

Mitigation Measure 5-3. Prior to the issuance of each foundation permit, the property owner/developer shall submit a report prepared by a geotechnical engineer for review and approval which shall investigate the subject foundation excavations.

Mitigation Measure 5-4. Prior to the issuance of each building permit, the property owner/developer shall submit plans showing that the proposed structure(s) has been analyzed for earthquake loading and

designed according to the most recent seismic standards in the Uniform Building Code adopted by the City of Anaheim.

Mitigation Measure 5-5. Prior to final building inspection for the two proposed hotels and the baseball stadium, the property owner/developer shall submit an earthquake emergency response plan for review and approval. The plan shall require posted notices in all hotel rooms and throughout the stadium on earthquake safety procedures and incorporate ongoing earthquake training for hotel and stadium staff.

Mitigation Measure 5-6. During grading activities, the property owner/developer shall implement standard practices from City Ordinance (Title 17) and policies.

HYDROLOGY AND WATER QUALITY

Hydrology

Mitigation Measures 6-1. Prior to the issuance of building permits, the property owner/developer shall submit a detailed drainage plan to the City of Anaheim Public Works Department and the Orange County Flood Control District for review and approval. This drainage report shall be in conformance with the City's Master Plan of Drainage, Drainage District Map 27. The drainage plan shall demonstrate that runoff will effectively be conveyed to the surrounding offsite drainage system and runoff rates would not affect receiving drainage facilities. More specifically, the drainage study shall examine the existing and the proposed conditions within the project limits and detail drainage deficiencies based upon the water elevations of the Santa Ana River in accordance with Drainage District Map 27. All drainage components shall be designed to the minimum requirements of the City and County.

Flooding

Mitigation Measure 6-2. Prior to the issuance of building permits, the property owner/developer shall submit plans documenting that the design of all aboveground structures (with the exception of parking structures) shall be at least 1 foot higher than the 100-year flood zone. All structures below this level shall be flood-proofed to prevent damage to property or harm to people.

Mitigation Measure 6-3. Prior to the issuance of building permits, the property owner/developer shall demonstrate project conformance with the City's Flood Hazard Reduction Ordinance No. 4136 (Chapter 17.28 of the Anaheim Municipal Code) to the City of Anaheim Public Works Department,

which pertains to properties that lie within the "AO" Flood Hazard Zone (Anaheim Floodplain Overlay Zone).

Water Quality

Mitigation Measures 6-4. At least 90 days prior to the initiation of grading activities, a NOI shall be filed with the RWQCB by the property owner/developer pursuant to the NPDES. The NOI shall include a Stormwater Pollution Prevention Plan which describes the structural and nonstructural Best Management Practices that will be implemented during construction within the project area as well as BMPs for long-term operation of the project area. Long-term measures could include, but may not be limited to, street-sweeping, trash collection, proper materials storage, designated wash areas connected to sanitary sewers, filter and grease traps, and clarifiers for surface parking areas.

EMPLOYMENT, POPULATION, AND HOUSING

No mitigation required.

PUBLIC SERVICES, UTILITIES, AND ENERGY CONSUMPTION

Fire and Emergency/Medical Services

Mitigation Measure 8.1-1. Prior to approval of the Grading Plan, the property owner/developer shall submit an emergency fire access plan to the Fire Department for review and approval to ensure that service to the site is in accordance with Fire Department requirements.

Mitigation Measure 8.1-2. Where required, prior to the issuance of each building permit, plans shall indicate buildings which shall have sprinklers installed by the property owner/developer in accordance with the Anaheim Municipal Code. Said sprinklers shall be installed prior to each final building and zoning inspection.

Mitigation Measure 8.1-3. Prior to the issuance of each building permit, plans shall be submitted to ensure that development is in accordance with the City of Anaheim Fire Department Standards, including:

- a. Overhead clearance shall not be less than 14 feet for the full width of access roads.
- b. Bridges and underground structures to be used for Fire Department access shall be designed to support Fire Department vehicles weighing 75,000 pounds.

- c. All underground tunnels shall have sprinklers. Water supplies are required at all entrances. Standpipes shall also be provided when determined to be necessary by the Fire Department.
- d. Adequate fire hydrants shall be provided. The precise number, types, and locations of the hydrants shall be determined during building permit review. Hydrants are to be a maximum of 400 feet apart and designed to provide the required fire flow.
- e. Flow rates for public parking facilities (excluding open parking garages) shall be set at 1,000 to 1,500 gpm with a minimum pressure of 20 psi.

Mitigation Measure 8.1-4. Prior to commencement of structured framing onsite fire hydrants required shall be installed and charged by the property owner/developer, as required and approved by the Fire Department.

Mitigation Measure 8.1-5. Prior to issuance of each building permit, the property owner/developer shall submit a Construction Fire Protection Plan which shall include detailed design plans for accessibility of emergency fire equipment, fire hydrant location, and any other construction features required by the Fire Marshal. The property owner/developer shall be responsible for securing facilities acceptable to the Fire Department and hydrants shall be operational with required fire flow.

Mitigation Measure 8.1-6. Prior to approval of street improvement plans, the water supply system shall be designed by the property owner/developer to provide sufficient fire flow pressure and storage for the proposed land use and fire protection in accordance with Fire Department requirements.

Mitigation Measure 8.1.7. The property owner/developer shall provide for an additional first-aid station at the new stadium.

Police Services

Mitigation Measure 8.2-1: Prior to the approval of the final site plan and issuance of each building permit, the property owner/developer shall submit plans to the Police Department for review and approval for the purpose of incorporating safety measures in the project design including the concept of crime prevention through environmental design (i.e., building design, circulation, site planning, and lighting of parking structure and parking areas).

Mitigation Measure 8.2-2: Prior to the issuance of each building permit for a parking structure, the property owner/developer shall submit plans to the Police Department for review and approval indicating the provision of closed circuit monitoring and recording or other substitute security

measures as may be approved by the Police Department. Said measures shall be implemented prior to final building and zoning inspections.

Mitigation Measure 8.2-3: Ongoing during project operation, the property owner/developer shall provide private security on the premises to maintain adequate security for the entire project subject to review and approval of the Police Department. The use of security patrols and electronic security devices (i.e., video monitors) shall be considered to reduce the potential for criminal activity in the area.

Mitigation Measure 8.2-4: Prior to the issuance of each building permit, the property owner/developer submit design plans that shall include parking lots and parking structures with controlled access points to limit ingress and egress if determined to be necessary by the Police Department, and shall be subject to the reviews and approval of the Police Department.

Solid Waste Disposal Services

Mitigation Measure 8.3-1. Prior to issuance of each building permit, the property owner/developer shall submit project plans to the Maintenance Department for review and approval to ensure that the plans comply with AB 939, the Solid Waste Reduction Act of 1989, the County of Orange and City of Anaheim Integrated Waste Management Plans as administered by the City of Anaheim. Prior to final building and grading inspections, implementation of said plan shall commence and shall remain in full effect as required by the Maintenance Department.

In order to meet the requirements of the Solid Waste Reduction Act of 1989 (AB 939), the property owner/developer shall implement numerous solid-waste reduction programs, as required by the Maintenance Department, including but not limited to:

- Detailing the locations and design of onsite recycling facilities.
- Providing onsite recycling receptacles to encourage recycling.
- Participating in the City of Anaheim's "Recycle Anaheim" program or other substitute program as may be developed by the City.
- Facilitating paper recycling by providing chutes or convenient locations for sorting and recycling bins.
- Facilitating cardboard recycling (especially in retail areas) by providing adequate space and centralized locations for collection and bailing.

- Facilitating glass recycling (especially from restaurants) by providing adequate space for sorting and storing.
- Providing trash compactors for nonrecyclable materials whenever feasible to reduce the total volume of solid waste and the number of trips required for collection.
- Providing on-site recycling receptacles accessible to the public to encourage recycling for all businesses, employees, and patrons where feasible.
- Prohibiting curbside pick-up.
- Ensuring hazardous materials disposal complies with federal, state, and city regulations.

Mitigation Measure 8.3-2. On-going during project operations, the following practices shall be implemented, as feasible, by the property owner/developer:

- Usage of recycled paper products for stationery, letterhead, and packaging.
- Recovery of materials such as aluminum and cardboard.
- Collection of office paper for recycling.
- Collection of polystyrene (foam) cups for recycling.
- Collection of glass, plastics, kitchen grease, laser printer toner cartridges, oil, batteries, and scrap metal for recycling or recovery.

Mitigation Measure 8.3-3. Prior to issuance of a demolition permit, the property owner/developer shall submit a Demolition and Import/Export Plans, if determined to be necessary by the Public Works/Engineering Department, Traffic Engineering Division and/or Maintenance Department. The plans shall include identification of offsite locations for material export from the project and options for disposal of excess material. These options may include recycling of materials onsite, sale to a broker or contractor, sale to a project in the vicinity or transport to an environmentally cleared landfill, with attempts made to move it within Orange County. The property owner/developer shall offer recyclable building materials, such as asphalt or concrete for sale or removal by private firms or public agencies for use in construction of other projects, if all cannot be reused on the project site.

Parks

No mitigation required.

Schools

Mitigation Measure 8.6-1. Prior to final building permit, a new Well No.45 will be installed. This well will serve as a major source of supply for the proposed project. This new well will be installed near the intersection of Katella Avenue and the Anaheim Sports Center. The implementation of this well shall be timed to coincide with the level of development onsite that would require this improvement, to the satisfaction of the City Engineer.

Mitigation Measure 8.6-2. A new 16 inch pipeline will be constructed by the property owner/developer in Katella Avenue from Well No. 45 to the exiting 18 inch line at the intersection of Katella Avenue and State College Boulevard. An additional offsite 16-inch pipeline will be constructed to replace a portion of the exiting 12-inch pipeline along State College Boulevard. This new pipeline in State College Boulevard will extend from Gene Autry Way to the existing connection in Katella Avenue. These new pipelines shall be constructed in conjunction with project development to complete a loop with the sites proposed and the surrounding system. The implementation of this pipeline shall be timed to coincide with the level of development onsite that would require this improvement, to the satisfaction of the City Engineer.

Mitigation Measure 8.6-3: Water conservation will be an important part of proposed project and it will be achieved through numerous measures intended to reduce water consumption. The City of Anaheim adopted the Landscape Water Efficiency Guidelines with certain voluntary and mandatory landscape requirements. This ordinance is in compliance with the State of California Water Conservation in Landscaping Act (AB 325). Among the measures to be implemented with the proposed project area are the following:

- Use of water-conserving landscape plant materials wherever feasible.
- Use of vacuums and other equipment to reduce the use of water for wash down of exterior areas.
- Low-flow fittings, fixtures and equipment including low flush toilets and urinals.
- Use of self-closing valves for drinking fountains.
- Use of efficient irrigation systems such as drip irrigation and automatic systems which use moisture sensors.
- Infrared sensors on sinks, toilets and urinals.
- Low-flow shower heads in hotels.

- Infrared sensors on drinking fountains.
- Use of irrigation systems primarily at night, when evaporation rates are lowest.
- Water-efficient ice machines, dishwashers, clothes washers, and other water using appliances.
- Cooling tower recirculating system.
- Use of low flow sprinkler heads in irrigation system.
- Use of waterway re-circulation systems.
- Provide information to the public in conspicuous places regarding water conservation.
- Use of reclaimed water for irrigation and washdown when it becomes available.

In connection with submittal of landscape and building plans, the applicant shall identify which of these measures have been incorporated into the plans.

Mitigation Measure 8.6-5. Prior to issuance of the first building permit the applicant shall enter into an agreement with the City of Anaheim to pay all water fees associated with the project.

Wastewater

Mitigation Measure 8.7.1. Prior to issuance of each building permit, the property owner/developer shall, to the satisfaction of the City Engineer, enter into an agreement with the City of Anaheim and the CSDOC to pay all connection and treatment plant capacity fees associated with the project.

Mitigation Measure 8.7.2. Prior to the issuance of the first building permit for the project, the property owner/developer shall, to the satisfaction of the City Engineer, provide funding for or construct adequate sewer facilities to accommodate flows from the northeasterly portion of the site. Implementation of a new baseball stadium would require the relocation of an onsite 8- and 12-inch line. Development of a new football stadium would require the relocation of an onsite 8-inch line. Under either scenario, these lines would be relocated to the northeasterly section of the east ring road to accommodate flows from the northeasterly portion of the site. These lines will connect with SARI.

Mitigation Measure 8.7.3. Prior to issuance of the first building permit, the property owner/developer shall, to the satisfaction of the City Engineer, provide funding for or construct an adequate sewer facility to accommodate flows from the western portion of the site. Implementation

of a new baseball stadium would require a separate 8-, 15-, and 18-inch line. Development of a new football stadium would require a separate 8-, 18-, and 21-inch line. Under either scenario, these lines would be placed along the westerly side of the west ring road to accommodate flows from the western portion of the site. These lines will connect with the CSDOC Orangewood Diversion Trunk Sewer.

Mitigation Measure 8.7.4. Prior to issuance of each building permit, the property owner/developer shall provide, to the satisfaction of the City Engineer, all lateral lines and connects required to service the individual development within the planned Anaheim Sports Center.

Storm Drains

Mitigation Measure 8.8.1. The property owner/developer shall construct a new drainage system to drain the northerly portion of the property. This system will be constructed in the project's ring road and will consist of pipe sizes ranging from 36 to 54 inches. This new drainage facility will also join with the existing SACF E12. The implementation of these pipelines shall be timed to coincide with the level of development onsite that would require these improvements, to the satisfaction of the City Engineer.

Mitigation Measure 8.8.2. The property owner/developer shall construct a new drainage system of pipes that will be needed to drain the central portion of the property to the satisfaction of the City Engineer. This system will be constructed in the ring road and will consist of pipe sizes ranging from 24 to 42 inches. This new drainage facility will also join with the existing SACF E12. The implementation of these pipelines shall be timed to coincide with the level of development onsite that would require these improvements, to the satisfaction of the City Engineer.

Mitigation Measure 8.8.3. The property owner/developer shall apply for and obtain a National Pollution Discharge Elimination System (NPDES) construction permit. This permit would require the preparation of a Storm Water Pollution Prevention Plan to mitigate the erosion that may occur during construction periods from storm water runoff.

Electricity

Mitigation Measure 8.9.1. The property owner/developer shall construct a new conduit system, that shall interface with and/or replace the existing underground 12 kV conduit system serving Anaheim Stadium, in the ring road for onsite electrical distribution to the satisfaction of the City Public Utilities Department. The implementation of this conduit system shall be timed to coincide with the level of development onsite that would require this improvement, to the satisfaction of the City Public Utilities Department.

Mitigation Measure 8.9-2. Prior to issuance of each building permit, the property owner/developer shall submit plans showing that each structure will comply with the State Energy Efficiency Standards for Nonresidential Buildings (Title 24, Part 6, Article 2, California Code of Regulations) and will consult with the City of Anaheim Public Utilities Resource Efficiency Division in order to review above Title 24 measures prior to each final building and zoning inspection to incorporate into the project design including energy efficient designs. This consultation shall take place during project design to incorporate into the project design energy efficiency and allow potential systems alternatives such as thermal energy storage air-conditioning and building envelope options.

Mitigation Measure 8.9-3. In order to conserve energy, prior to issuance of each building permit, the property owner/developer shall implement energy-saving practices in compliance with Title 10, which may include the following:

- High-efficiency air conditions with EMS (computer) control.
- Variable Air Volume (VAV) air distribution.
- Outside air (100 percent) economizer cycle.
- Staged compressors or variable speed drives to flow varying thermal loads.
- Isolated HVAC zone control by floors/separable activity areas.
- Specification of premium-efficiency electric motors (i.e., compressor motors, air handling units, fan-coil units).
- Use of occupancy sensors in appropriate spaces.
- Use of compact fluorescent lamps in place of incandescent lamps.
- Use of T-8 lamps and electronic ballasts where application of standard fluorescent fixtures are identified.
- Use of metal-halide or high-pressure sodium (high intensity discharge) lamps for outdoor lighting and parking lots.
- Consideration of thermal energy storage air conditioning for hotel buildings, meeting facilities, theaters, or other intermittent-use spaces or facilities that may require air-conditioning during summer, day-peak periods.
- Consideration for participation in Resource Efficiency's Programs such as:
 - New Construction Design Review, in which the City cost-shares engineering fees for design of energy efficient buildings and systems.

- Energy Sale for New Construction - Cash incentives (\$150 to \$400 per kW reduction in load) for efficiency that exceeds Title 24 requirements.
- Thermal Energy Storage Feasibility Study - Cost sharing of up to \$5,000 for the feasibility study of TES applied to new facilities.

Mitigation Measure 8.9-4. Prior to issuance of each building permit for any buildings requiring a change in electrical service, the property owner/developer shall install an underground electrical service from the Public Utilities Distribution System. The Underground Service will be installed in accordance with the Electric Rules, Rates, Regulations and Electrical Specifications for Underground Systems. Electrical Service Fees and other applicable fees will be assessed in accordance with the Electric Rules, Rates, Regulations and Electrical Specifications for Underground Systems.

Natural Gas Service

No mitigation required.

Cable Service and Television Reception

Mitigation Measure 8.11-1. If deemed necessary, within 6 months after completion of building exteriors of new developments over 75 feet in height, a study of area television reception shall be undertaken by the property owner/developer and submitted to the City Engineer for review and approval. If the City of Anaheim determines that the proposed project creates a significant impact on broadcast television reception at local residences and other existing hotels/restaurants or other businesses, a signal booster or relay system shall be installed by the property owner/developer immediately on the roof of the tallest project building to restore television reception to its original condition.

Telephone Service

No mitigation required.

HAZARDOUS MATERIALS COMPLIANCE

Mitigation Measure 9-1. Ongoing during demolition and construction, in the event that hazardous waste is discovered during site preparation or construction, the property owner/developer shall ensure that the identified hazardous waste and/or hazardous material is handled and disposed of in the manner

specified by the State of California Hazardous Substances Control Law (Health and Safety Code, Division 20, Chapter 6.5) and according to the requirements of the California Administrative Code, Title 30, Chapter 22.

Mitigation Measure 9-2. The applicant shall handle and disposal of all hazardous materials and wastes during the operation and maintenance of facilities in accordance with the state codes identified in Mitigation Measure No. 2 above.

AESTHETICS

No mitigation required.

CULTURAL RESOURCES

Mitigation Measure 11-1. Prior to approval of a grading plan, the property owner/developer shall submit a letter to the Public Works/Engineering Department, Development Division, and the Planning Department, Planning Division, identifying the certified archaeologist that has been hired to ensure that the following actions are implemented:

- a. The archaeologist must be present at the pregrading conference in order to establish procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of artifacts if potentially significant artifacts are uncovered. If artifacts are uncovered and determined to be significant, the archaeological observer shall determine appropriate actions in cooperation with the property owner/developer for exploration and/or salvage.
- b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.
- c. Any archaeological work at the site shall be conducted under the direction of the certified archaeologist. If any artifacts are discovered during grading operations when the archaeological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.
- d. A final report detailing the findings and disposition of the specimens shall be submitted to the City Engineer. Upon completion of the grading, the archaeologist shall notify the City to when the final report will be submitted.

Mitigation Measure 11-2. Prior to approval of a grading plan, the property owner/developer shall submit a letter to the Public Works/Engineering Department, Development Division, and the Planning

Department, Planning Division, identifying the certified paleontologist that has been hired to ensure that the following actions are implemented:

- a. The paleontologist must be present at the pregrading conference in order to establish procedures to temporarily halt or redirect work to permit the sampling, identification, and evaluation of fossils if potentially significant paleontological resources are uncovered. If artifacts are uncovered and found to be significant, the paleontological observer shall determine appropriate actions in cooperation with the property owner/developer for exploration and/or salvage.
- b. Specimens that are collected prior to or during the grading process will be donated to an appropriate educational or research institution.
- c. Any paleontological work at the site shall be conducted under the direction of the certified paleontologist. If any fossils are discovered during grading operations when the paleontological monitor is not present, grading shall be diverted around the area until the monitor can survey the area.
- d. A final report detailing the findings and disposition of the specimens shall be submitted. Upon completion of the grading, the paleontologist shall notify the City as to when the final report will be submitted.

SECTION 9
ORGANIZATIONS AND PERSONS CONSULTED

9.1 CITY OF ANAHEIM

City Attorney's Office	Selma Mann
Consulting City Attorney	Josh Gottheim
Fire Department	Gary Wilder
Parks, Recreation, and Community Services	Dick Mayer
Planning Department, Planning Division	Greg McCafferty Sean Gerber
Police Department	Chief Randall W. Gaston
Stadium Operations	Norma Dine Phil Larcus
Water Division	Jodi Rodginson Ronald Sparks Carlos Bustos

Organizations and Person Consulted by IWA Engineers is Forthcoming

9.2 OTHER AGENCIES

Anaheim City School District	Jack Sarnicky Jean Hockett Dorothy Drew
Anaheim Unified High School District	Rita S. Newman
Callifornia Employment Development Department	Linda Reed Spencer Wong
California Archaeological Information Center	Michelle Duncan
Orange County Flood Control District	Dick Runge
Orange County Integrated Waste Management	Tim Grogan
Orange County Sanitation Districts	Tom Dawes
Regional Water Quality Control Board, Santa Ana Region	Kamron Sarami
Southern California Association of Governments	Javier Minjares

9.3 PRIVATE ORGANIZATIONS

Multivision Cable Company	Bill Snyder
Pacific Bell Telephone Company	Diane Stern
Southern California Gas Company	Ronald Reed

SECTION 10
REPORT PREPARATION PERSONNEL

10.1 CITY OF ANAHEIM

City Administration	
Deputy City Manager	Tom Wood
Planning Department	
Planning Director	Joel Fick
Deputy Planning Director	Mary McCloskey
Associate Planner	Greg McCafferty
Assistant Planner	Sean Gerber
City Attorney	
Deputy City Attorney	Selma Mann
Consulting Attorney	Josh Gottheim
Public Works—Engineering Department	
Deputy City Engineer	Russell Maguire
Traffic and Transportation Manager	John Lower

10.2 MICHAEL BRANDMAN ASSOCIATES

Principal-in-Charge/Project Manager	Joan Patronite Kelly, AICP
Assistant Project Manager	Jason M. Brandman
Environmental Analysis	Michael Houlihan Jonathan Freeman Julie Gaa Marisa Liu
Air and Noise Assessment	Tung-chen Chung, Ph.D.
Graphics	Carl Workman Alice Houseworth
Word Processing	Charlene Kortgard
Editing	Bernadette Coleman

10.3 TECHNICAL SUBCONSULTANTS

Traffic Analysis (Austin-Foust Associates)	Joe Foust Catherine Lawrence
Public Services and Utilities Analysis (IWA Engineers)	Mark Bogh Tom Herbel

SECTION 11 BIBLIOGRAPHY

The documents which are specifically incorporated by reference are available for public review at the City of Anaheim Planning Department, 200 South Anaheim Boulevard, Anaheim, California, 92805. Other documents which served as secondary resource material for this EIR are made available by request to the City of Anaheim Planning Department.

The EIR appendices are available for public review at Anaheim public libraries and are available for review and/or purchase at the City of Anaheim Planning Department during the period of public review of the draft EIR.

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APPENDIX A
NOTICE OF PREPARATION AND CORRESPONDENCE



CITY OF ANAHEIM, CALIFORNIA

Planning Department

APRIL 7, 1995

**NOTICE OF PREPARATION
ENVIRONMENTAL IMPACT REPORT NO. 320
ANAHEIM SPORTSCENTER**

The City of Anaheim will be the lead agency and will prepare an Environmental Impact Report (EIR) for the Anaheim SportsCenter (the "Project"). Agency comments on the proposed Project and scope and content of the environmental information are requested.

The Project area encompasses the existing 159-acre Anaheim Stadium site located in the southerly portion of the City of Anaheim in central Orange County. The Project site is located generally west of the Santa Ana River and the SR-57 (Orange Freeway), south of Katella Avenue, east of State College Boulevard, and north of Orangewood Avenue.

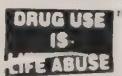
Existing land uses within and surrounding the Project area include Anaheim Stadium, Arrowhead Pond of Anaheim, Amtrak station, and a mix of light industrial, office, retail, and service establishments.

The proposed Project includes the preparation of an Urban Design Plan (Precise Plan) and EIR for the development of the Anaheim Stadium property. The Project will include the renovation of the existing Anaheim Stadium, reconfiguration of the 16,000-space parking area, construction of a potential new 45,000-seat baseball stadium, and complementary development comprising primarily of retail/urban entertainment type uses. As part of the Project, circulation and design linkages will be created between the Anaheim SportsCenter, Arrowhead Pond of Anaheim, and the Anaheim Resort (i.e., Convention Center and Disneyland). A more detailed description of the Project and its location is provided as an attachment to this notice.

The environmental issues to be addressed in the EIR will include, but not be limited to, the following:

Aesthetics/Visual Resources	Population/Employment & Jobs/Housing Balance
Air Quality	Hydrology/Water Quality
Earth Resources-Geology	Land Use
Soils & Seismicity	Noise
Hazardous Material Compliance	Public Services
Transportation/Circulation	Public Utilities/Energy Consumption
Cultural Resources	Growth Inducing & Cumulative Impacts

200 South Anaheim Boulevard
P.O. Box 3222, Anaheim, California 92803 (714) 254-5139



**NOTICE OF PREPARATION
ENVIRONMENTAL IMPACT REPORT NO. 320
ANAHEIM SPORTSCENTER**

**April 7, 1995
Page 2**

In accordance with the time limits mandated by State Law, please send your response at the earliest date, but no later than 30 days after receipt of this notice, to Greg McCafferty at the address shown below.

Mr. Greg McCafferty, Associate Planner
City of Anaheim Planning Department
200 South Anaheim Boulevard
Anaheim, CA 92805

The City will conduct a public scoping meeting as part of the environmental review process. Scoping is useful in identifying potential environmental issues to be analyzed in the EIR. It should be noted that this is an optional process and is conducted to receive public input, not to consider the merits of the proposal. The decision-making process will commence following completion of the EIR.

ALL INTERESTED PARTIES ARE INVITED TO ATTEND A PUBLIC SCOPING MEETING TO ASSIST IN IDENTIFYING ISSUES TO BE ADDRESSED IN THE EIR. ATTENDEES WILL HAVE AN OPPORTUNITY TO PROVIDE INPUT TO THE CONSULTANTS PREPARING THE EIR.

The public scoping meeting will be held on:

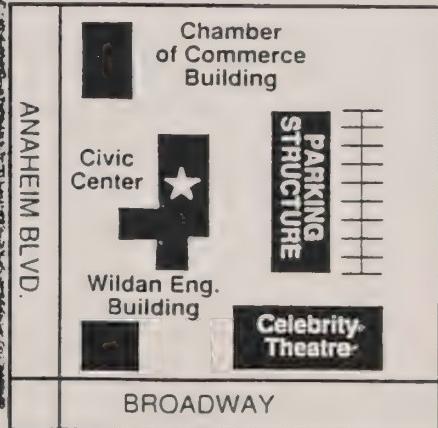
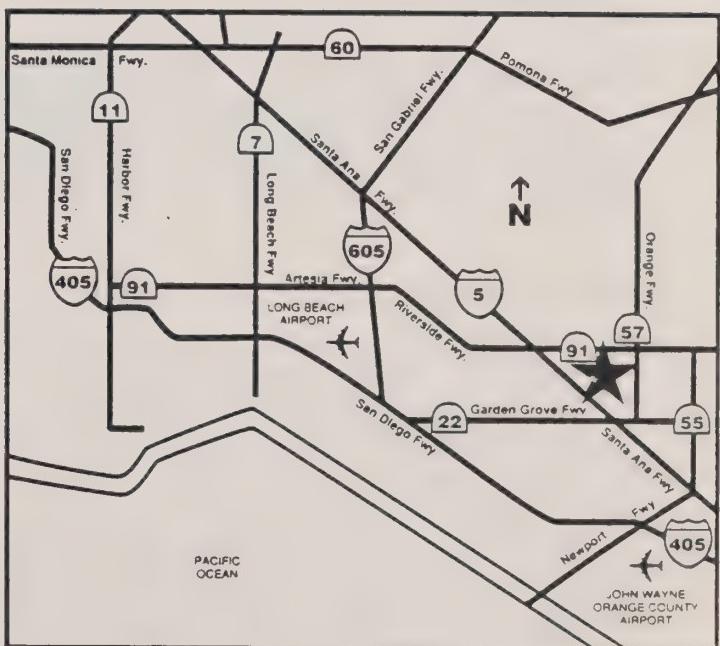
April 26, 1995 at 6:00 p.m.
City of Anaheim
City Council Chamber
200 South Anaheim Boulevard
Anaheim, California

Thank you for your prompt response. If you have any questions, please contact Greg McCafferty at (714) 254-5139, extension 5743.

Attachment
ap2030gm.wp

**CITY OF ANAHEIM
CIVIC CENTER
200 S. ANAHEIM BLVD.
ANAHEIM, CALIFORNIA 92805**

Directions to City of Anaheim Council Chambers — 1st floor, Civic Center



NOTICE OF PREPARATION ANAHEIM SPORTSCENTER

INTRODUCTION

The City of Anaheim ("City") is the Lead Agency responsible for preparing an Environmental Impact Report (EIR) for the actions related to implementation of the proposed Anaheim SportsCenter (the "Project"). The Project encompasses the existing 159-acre Anaheim Stadium site located within the southerly portion of the City of Anaheim. The objective of the Project is to develop a plan for the economic development and enhancement of the Anaheim Stadium property. The plan will also identify distinct linkages between the existing Anaheim Stadium, a potential new baseball stadium that will be evaluated as a part of this Project, Arrowhead Pond of Anaheim, and the Anaheim Resort (i.e., Convention Center and Disneyland area). A list of potential discretionary actions is provided later in this document.

This Notice of Preparation (NOP) presents information on the proposed Project description, identifies probable environmental effects and describes the actions required for Project approval. This NOP is being distributed to all responsible agencies, trustee agencies, and interested parties as required by the California Environmental Quality Act (CEQA).

EXISTING CONDITIONS

The Project Area is already developed and consists of Anaheim Stadium, surrounding surface parking, and Amtrak facilities. The property is located within the Anaheim Stadium Industrial Area and is designated as Commercial Recreation on the Anaheim General Plan Land Use Map. The property is also a redevelopment project area. Surrounding land uses include a mix of office, service, retail and industrial uses. Regional access to the site is provided from SR-57 (Orange Freeway) and I-5 (Santa Ana Freeway). Access to the site is from State College Boulevard, Gene Autry Way, Katella Avenue, Douglass Road, and Orangewood Avenue.

In response to emerging market trends and the City's desire to examine land use opportunities in the Stadium area, the Anaheim City Council directed staff to conduct the Anaheim SportsCenter study. A number of factors have influenced the land use character in and around the area. Specifically, the construction of the new Arrowhead Pond of Anaheim has attracted new fans and visitors to the area, thus providing the City with an opportunity to explore land uses that would be complementary to both the Arena and the Stadium. In addition, ongoing efforts in the nearby Anaheim Resort coupled with the potential Disneyland and Convention Center expansions provide the City with an opportunity to examine linkages between these areas. The City of Anaheim has

proposed the Anaheim SportsCenter as a means to provide additional sports and entertainment venues to meet the recreational demands of fans, visitors, local business people, and residents.

A planning process is currently underway to determine the appropriate concept and program for the Anaheim SportsCenter. Because the program is ongoing, it is not possible to precisely define the proposed Project at this time. The environmental process, which is being conducted in connection with the planning process, will enable the Project to be developed with the objective of impact avoidance to the maximum extent feasible. A framework for the proposed Project is described in this NOP; however, changes may occur during the planning process. Changes in the proposed Project will be clearly noted in the draft EIR and assessed accordingly.

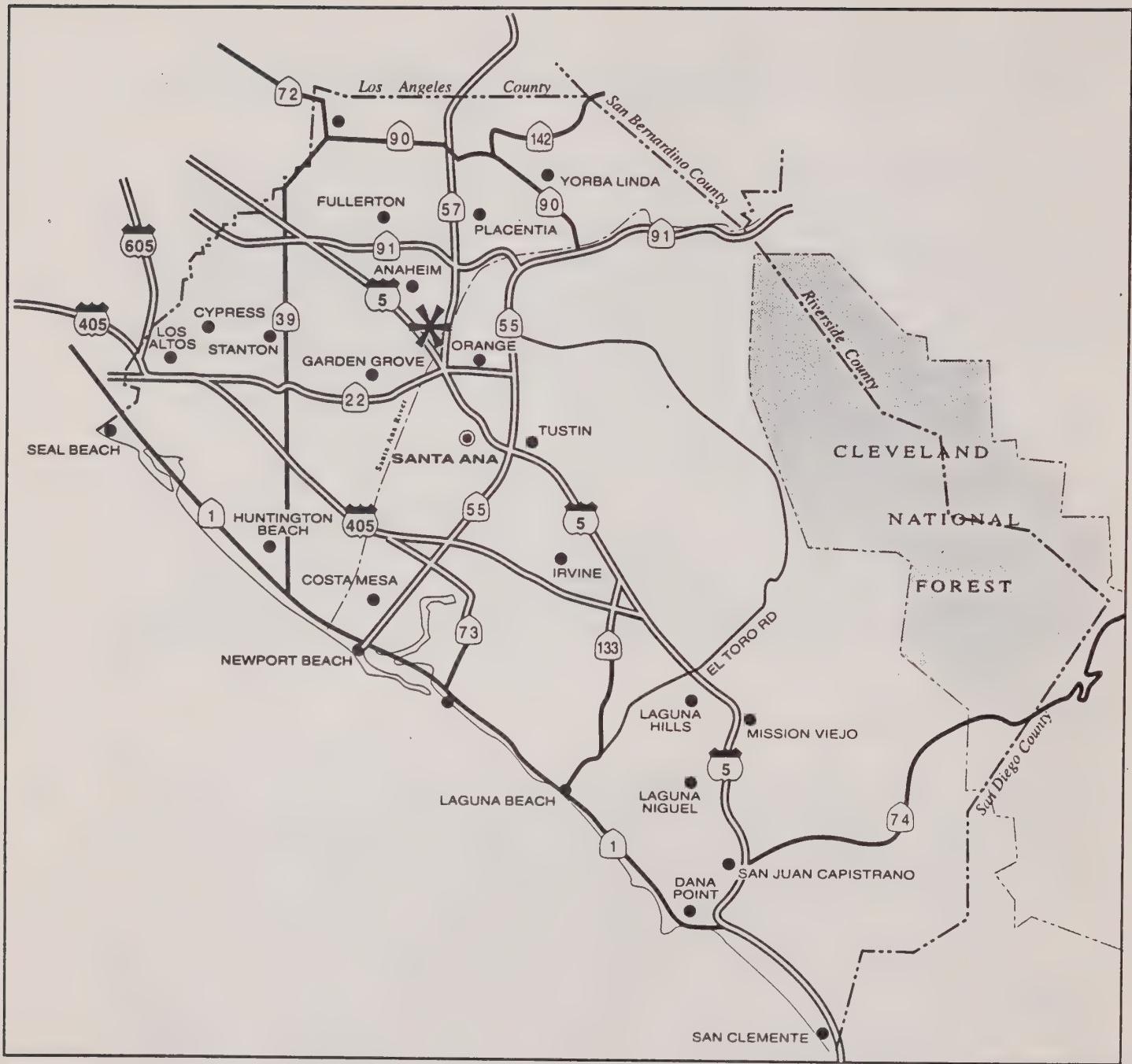
DESCRIPTION OF THE PROJECT

Project Location

As shown in Exhibit 1, the Project is located within the Anaheim Stadium Area in central Orange County. The site occupies approximately 159 acres and is located generally west of the Santa Ana River and SR-57 (Orange Freeway), south of Katella Avenue, east of State College Boulevard, and north of Orangewood Avenue (see Exhibit 2).

Project Characteristics

The proposed Project includes the preparation of an Urban Design Plan (including a Public Facilities Plan and a Precise Plan) for the Anaheim Stadium property. The proposed Project will include the renovation of the existing Anaheim Stadium, reconfiguration of the existing 16,000-space parking area, construction of a new 45,000-seat baseball stadium, and complementary land uses comprising a retail/urban entertainment center (retail, entertainment, hotel, etc.) that would provide linkage between Anaheim Stadium, the proposed baseball stadium, the Arrowhead Pond of Anaheim, and the surrounding area. The Project will also identify circulation and design linkages between the Anaheim SportsCenter and the Anaheim Resort (i.e., Convention Center and Disneyland area). In addition, vehicular and pedestrian circulation patterns will be analyzed, design guidelines will be developed for the retail/entertainment uses, and comprehensive landscape and graphic design elements will be created for both public and private spaces. The following table outlines the general type of land uses and estimated square footages for the proposed retail/entertainment component of the Project. Please note these are estimates and that the precise amount of square footage will be refined during the preparation of the draft EIR.



LEGEND



Project Location



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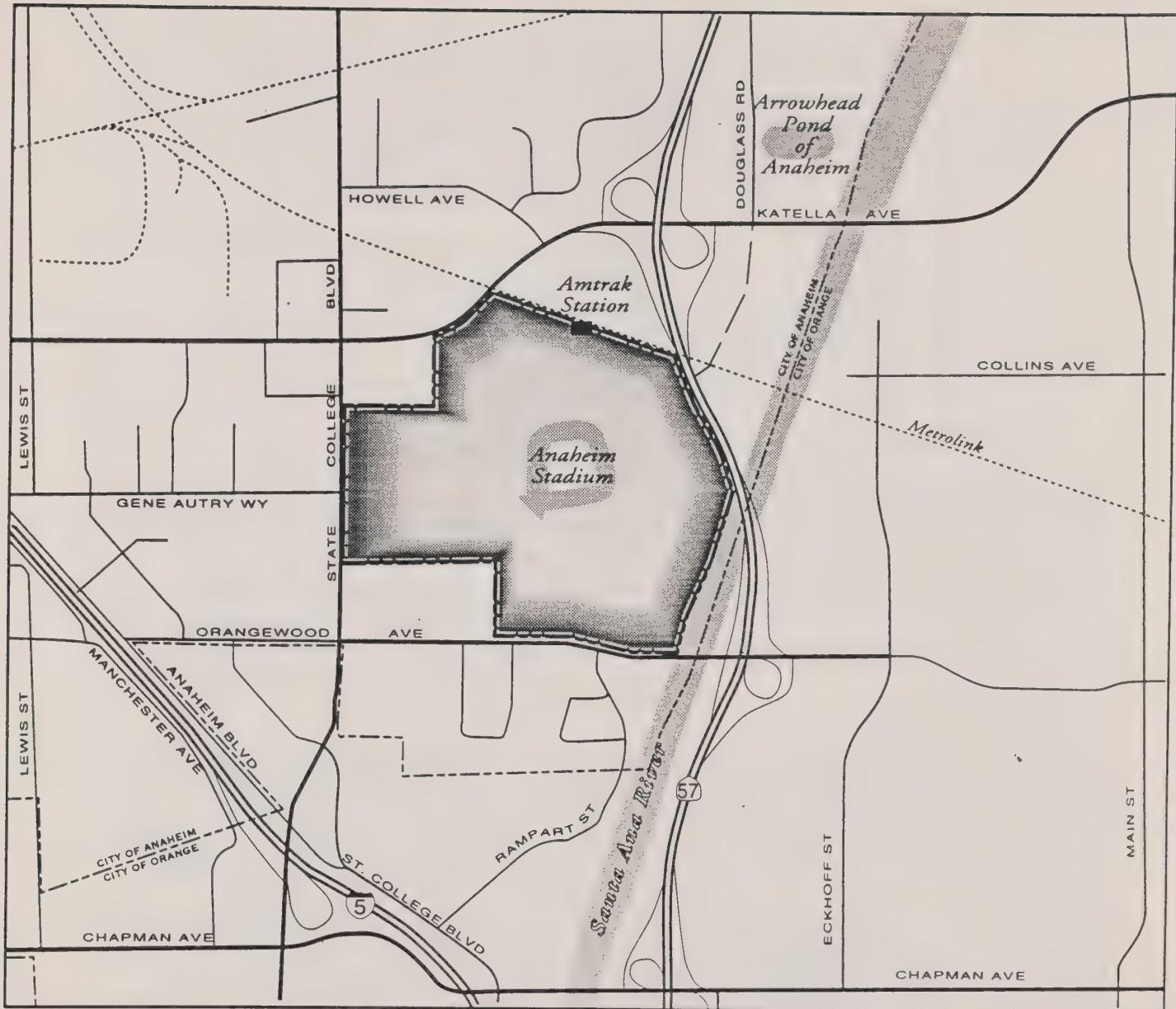
SCALE IN MILES



Michael Brandman Associates

19870001 • 4/95

exhibit 1
Regional Location Map
ANAHEIM SPORTSCENTER EIR



LEGEND



Project Boundary



2000' 1000' 0' 2000'



Michael Brandman Associates

19870001 • 4/95

exhibit 2
Site Vicinity Map
ANAHEIM SPORTSCENTER EIR

PROPOSED USES	
<u>LAND USE</u>	<u>MAXIMUM ESTIMATED DENSITY</u>
	<u>Seats/Square Feet (S.F.)/Rooms</u>
Stadium	45,000 seats (1.3 million s.f.)
Retail	150,000-200,000 s.f.
Entertainment	75,000-150,000 s.f.
Restaurant	30,000-50,000 s.f.
Office	50,000-200,000 s.f.
Hotel	200-400 rooms

Although specific types of development have not been identified as part of the Project, the categories identified above, together with the estimated square footages, would allow for an array of onsite uses. These may include retail (clothing stores, bookstores, specialty sporting goods, galleries), entertainment (movie theaters, live theaters, comedy clubs), restaurants (food court, sports bar and night clubs, coffee houses), sports-oriented businesses, office, banking and hotel services.

Discretionary Actions

The City anticipates that the Project will require a number of discretionary actions. These actions may include: amendments to the Anaheim General Plan, zoning reclassification, and related land use approvals which may include conditional use permits, variances, and subdivision maps. Further, the Project may also require the following approvals by the City of Anaheim: financing mechanisms, agreements, abandonment of streets or subsurface rights, demolition permits, grading permits, building permits, encroachment permits, property acquisition, implementation of the Recovery Plan for the Anaheim Stadium Project Area including agreements and improvements, and other actions related to implementation of the Project.

PURPOSE OF THE EIR

The EIR is being prepared by the City of Anaheim to assess the potential environmental impacts that may arise in connection with the development of the Project. This is a project EIR and as such will examine the environmental impacts specific to the development of the Anaheim SportsCenter. The EIR will examine all phases of the Project, including planning, construction, and operation as defined in Section 15161 of the CEQA Guidelines. Upon completion of the EIR, no further environmental review will be necessary to carry out the Project as currently planned.

PROJECT ALTERNATIVES

In addition to evaluating the potential environmental effects of the Project, the EIR will address a full range of project alternatives including, but not limited to, an alternative design, alternative site, and the "no-project" alternative as required by CEQA.

RELATED PROJECTS

Section 15130 of the CEQA Guidelines require the consideration of cumulative impacts by the EIR. Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. The individual effects may be changes resulting from a single Project or a number of separate projects. As part of this Project, the EIR will identify which projects may contribute to cumulative impacts. More specifically, the EIR will evaluate the change in the environment which results from the cumulative impact of the Project when considered together with other closely related future projects in the Stadium area.

RELEVANT PLANNING PROGRAMS

Planning programs which are relevant to the Project area, but are not proposed as part of the Anaheim SportsCenter, include the following:

- **Anaheim Resort Specific Plan:** The City of Anaheim has adopted a Specific Plan for approximately 483 acres of land in the City's Commercial Recreation Area. The Specific Plan identifies subareas or districts in establishing land uses and development standards/design guidelines and specified public facilities necessary for ultimate development in the Anaheim Resort.
- **Disneyland Resort Specific Plan:** The Disneyland Resort consists of approximately 550 acres of land in the City's Commercial Recreation Area and is surrounded by the Anaheim Resort. This project consists of developing a theme park, hotels (up to 5,600 rooms), retail, parking, related uses, and a future expansion area.
- **Anaheim Stadium Project Area & Recovery Plan:** The plan addresses both short term disaster mitigation (caused by the January 17, 1994, earthquake centered in the San Fernando Valley) and long term design and improvement deficiencies for Anaheim Stadium.
- **Katella Avenue Smart Street:** The Orange County Transportation Authority has certified an EIR for the Katella Avenue Smart Street Project which addresses the potential impacts of widening Katella Avenue throughout the Project area.

In addition, the City of Anaheim has prepared environmental assessments separate from the Katella Avenue Smart Street Project at the following critical intersections:

- Katella Avenue and Harbor Boulevard
 - Katella Avenue and Haster Street
 - Katella Avenue and State College Boulevard
- **The I-5 Widening EIR/EIS:** Caltrans and the Federal Highway Administration have certified the EIR/EIS for the I-5 Freeway Widening.
 - **City of Anaheim Utility Undergrounding Program:** The City has adopted a program to underground overhead utility facilities within the Project area.
 - **Convention Center Betterment IV Project:** The City has certified a Supplemental EIR for satellite parking associated with the expansion program for the Anaheim Convention Center.
 - **South Central City Sewer Study:** The City has completed a study of the South Central City sewer system to determine sewer capacities and provide remedial solutions based upon the General Plan land uses and densities.
 - **Other Transportation Studies:** Other relevant studies include the Orange County Transportation Authority (OCTA) Major Investment Study for Urban Rail, Orange County Commuter Rail Study, SR-91 (Riverside Freeway) Widening, SR-57 (Orange Freeway) HOV Lanes, SR-57 (Orange Freeway) Extension to the I-405 Freeway, Transit Way Interchange at Cerritos and the SR-57 (Orange Freeway), and the Metropolitan Drive Extension in the City of Orange. In addition to these studies, the OCTA is studying the feasibility of expanding commuter rail service by utilizing existing Amtrak rail lines.

The relationship of each of these programs and studies to the Project will be discussed in the EIR.

PROBABLE ENVIRONMENTAL EFFECTS

The EIR is being prepared to assess the potential environmental impacts that may arise in connection with future implementation of the Anaheim SportsCenter. Based on the environmental characteristics of the Project area and review of existing data and relevant programs, implementation of the proposed Project is expected to have the potential to create environmental impacts in the following areas: aesthetics/visual resources, air quality, earth resources-geology, soils and seismicity, hazardous materials compliance, hydrology/water quality, land use, noise, public services, utilities and energy consumption, population, employment and jobs/housing balance, and transportation/circulation. The developed character of the Project area precludes the potential of sensitive plant and/or animal species inhabiting the site or the surrounding area; therefore, the EIR will not address the topic of biological resources.

LEAD AGENCY

The City of Anaheim is the Lead Agency responsible for preparing the EIR. The Project and environmental processing will be administered through the City of Anaheim Planning Department with the contact person being as follows:

Mr. Greg McCafferty, Associate Planner
City of Anaheim Planning Department
200 South Anaheim Boulevard
Anaheim, California 92805
(714) 254-5139, Ext. 5743

ap2029gm.wp

DEPARTMENT OF TRANSPORTATION

DISTRICT 12
2501 PULLMAN STREET
SANTA ANA, CA 92705



June 6, 1995

Mr. Greg McCafferty
City of Anaheim
200 South Anaheim Boulevard
Anaheim, Ca. 92803

File: IGR/CEQA
SCH # none

Subject: Anaheim Sportscenter

Dear Mr. McCafferty:

Thank you for the opportunity to review and comment on the Notice of Preparation for the Anaheim Sportscenter. The proposed Project includes the preparation of an Urban Design Plan and EIR for the development of the Anaheim Stadium property. The Project will include the renovation of the existing Anaheim Stadium, reconfiguration of the 16,000 space parking area, construction of a potential new 45,000-seat baseball stadium, and complementary development comprising primarily of retail\urban entertainment type uses. As part of the Project, circulation and design linkages will be created between the Anaheim Sports Center, Arrowhead Pond of Anaheim, and the Anaheim Resort (i.e., Convention Center and Disneyland). The proposed project area encompasses the existing 159-acre Anaheim Stadium site located west of Santa Ana River and State Route 57. Caltrans District 12 is a responsible agency and has the following comments for your consideration.

An extensive traffic study shall be conducted to evaluate if this redevelopment will have regional impacts to the adjacent freeway facilities (I-5, SR-22, SR-57 and the 5/22/57 interchange). These calculations should use the Highway Capacity Manual. If it is found that this project will cause adverse impacts, then the mitigation measures and responsible funding sources should be discussed.

If the proposed project is constructed during the I-5 construction, there must be a discussion on traffic management, detours and stage construction of the I-5 segments A-E. Also, project should be scoped to anticipate utility relocation and closures of both short term and long term nature, as well as, the Convention/Disneyland area.

Also, the Draft Environmental Impact Report (DEIR) should discuss scheduling of events between the stadium and the arena, so as not to overload the traffic/circulation system. Caltrans feels this is an extremely important planning effort and must be done to assure that the regional access to Freeways I-5, SR-22, and SR-57 will operate at an acceptable Level of Service. Of special interest is the impacts on Route 57/Orangewood and Route 57 Katella interchanges.

Mr. Greg McCafferty

June 6, 1995

Page 2

In addition, an emergency/hazardous evacuation plan should be prepared that would discuss how the area would be cleared and how the regional arterials and freeways would operate.

Please continue to keep us informed of future developments which could potentially impact our State Transportation Facilities. If you have any questions, or need to contact us, please call Aileen Kennedy on (714) 724-2239.

Sincerely,



Robert F. Joseph, Chief
Advance Planning Branch

cc: Tom Loftus, OPR
Ron Helgeson, HDQTRS Planning
Tom Persons, HDQTRS Traffic Operations
Dorothy Uyehara, Transportation Analysis
Pat Ollervides, Traffic Operations
Lance Hinek, Project Development
Will Brisley, Project Management
Gary Slater, Project Management

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION
2010 IOWA AVENUE, SUITE 100
RIVERSIDE, CA 92507-2409
PHONE: (909) 782-4130
FAX: (909) 781-6288



May 1, 1995

Greg McCafferty
City of Anaheim
200 S. Anaheim Blvd.
Anaheim, CA 92805

**NOTICE OF PREPARATION (NOP) OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE
ANAHEIM SPORTSCENTER, SCH # 95041029**

Dear Mr. McCafferty:

We have reviewed the NOP for this project. In response to the statutory concerns of this office, the Draft EIR should address the following:

I. Water Quality

A. Potential impacts of the proposed project on surface and groundwater quality:

- Construction activities (including grading) that could result in water quality impacts.
- Soil characteristics related to water quality (potential for erosion and subsequent siltation, increase or decrease in percolation).
- Impacts of toxic substances handling and/or disposal (if appropriate).

B. Mitigation of Adverse Impacts.

II. Water, Wastewater and Solid Waste Service

A. Water

- Availability of water for the proposed project.
- Existing infrastructure: location of water supply lines, tie-ins.
- Applications or permits required for water acquisition.
- Impact or calculated project demand on water supply.

B. Waste Disposal/Treatment

- Types and amounts of waste materials generated by project.
- Proposed waste treatment and disposal methods. Existing infrastructure:
 - * treatment facilities: location, current capacity, treatment standards, master treatment facilities expansion plan (if appropriate)
 - * treatment plant collection system: location of major trunk lines and tie-ins, current capacity
 - * disposal facilities: location, capacity
- Applications or permits required to implement waste disposal.
- Impact of calculated project waste volume on capacity of existing and proposed treatment and disposal facilities.

III Permits

- The stormwater runoff from the proposed project will be regulated by an areawide stormwater discharge permit under the National Pollutant Discharge Elimination System (NPDES). A permit for Orange County has been granted to the County of Orange and several co-permittees by the Regional Board.
- A notice of intent (NOI) with the appropriate fees for coverage of the project under the General Construction Activity Storm Water Runoff Permit must be submitted to the State Water Resources Control Board at least 30-days prior to initiation of construction activity at the site. This is required for any construction activity over five acres in area.
- If a Section 404 permit from the Army Corp of Engineers is required for this project, a Section 401 Water Quality Certification is also required from the Regional Board. This certification verifies that the federal 404 permit complies with the state's water quality standards. Please note that the time frame for the issuance of a permit can be as long as 180 days from the time the permit application is accepted as complete.
- A National Pollutant Discharge Elimination System (NPDES) permit for any discharge of wastes to surface waters or a Waste Discharge Requirements for any discharge of wastes to land is required by the Regional Board.
- If reclaimed water is to be used in the proposed project, Water Reclamation Requirements will have to issued by the Regional Board.

Greg McCafferty
City of Anaheim

Page 3 of 3

May 1, 1995

We look forward to reviewing the Draft EIR when it becomes available. If you have any questions, please call me at (909) 782-4241.

Sincerely,

Scott A. Dawson

Scott A. Dawson
Environmental Specialist
Planning Section

cc: Mark Goss - State Clearinghouse



818 West Seventh Street, 12th Floor • Los Angeles, California 90017-3435 □ (213) 236-1800 • FAX (213) 236-1825

May 8, 1995

Greg McCafferty, Associate Planner
City of Anaheim Planning Department
200 South Anaheim Boulevard
Anaheim, CA 92805

RE: **Comments on the Anaheim SportsCenter NOP**
SCAG Clearinghouse No. I9500153

Dear Mr. McCafferty:

Thank you for the opportunity to review and comment on the Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) of the proposed Anaheim SportsCenter. As areawide clearinghouse for regionally significant projects, SCAG assists cities, counties and other agencies to review projects and plans for consistency with regional plans.

In addition, the California Environmental Quality Act (CEQA) requires that EIRs discuss any inconsistencies between the proposed project or plan with the applicable general plans and regional plans (Section 15125 [b]). If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

Please provide a minimum of 45 days for SCAG to review the DEIR when this document is available. If you have any questions regarding the attached comments, please contact Maria Casillas at (213) 236-1920.

Sincerely,

ERIC H. ROTH
Manager, Intergovernmental Review

Stella Mendoza City of Brawley-President, Ed Edelman Los Angeles County-First Vice President, Dick Kelly City of Palmdale-Second Vice President, Gaddi Vasquez Orange County-Past President, ● Richard Alarcon City of Los Angeles, Richard Alatorre City of Los Angeles, Robert Bartlett City of Monrovia, George Bass City of Bell, Ron Bates City of Los Alamitos, George Battey, Jr. City of Burbank, Hal Bernson City of Los Angeles, Walter Bowman City of Cypress, Marvin Braude City of Los Angeles, Susan Brooks City of Rancho Palos Verdes, Art Brown City of Buena Park, Yvonne Brathwaite-Burke Los Angeles County, Jim Busby, Jr. City of Victorville, Bob Buster Riverside County, Laura Chick City of Los Angeles, John Cox City of Newport Beach, Cynthia Crothers City of Moreno Valley, Hal Crofts City of Lomita, Richard Dixon City of Lake Forest, Doug Drummond City of Long Beach, Lillian Eaton City of Yucaipa, Joseph Esquivel City of Lakewood, John Ferraro City of Los Angeles, Karyn Foley City of Calabasas, John Flynn Ventura County, Ruth Galanter City of Los Angeles, Sandra Genis City of Costa Mesa, Jackie Goldberg City of Los Angeles, Candace Haggard City of San Clemente, Garland Hardeman City of Inglewood, Mike Hernandez City of Los Angeles, Nate Holden City of Los Angeles, Robert Jamison City of Artesia, Jeff Kellogg City of Long Beach, Abbe Land City of West Hollywood, John Longville City of Rialto, Ron Loveridge City of Riverside, John Melton City of Santa Paula, Barbara Messina City of Alhambra, Judy Mikels City of Simi Valley, David Myers City of Palmdale, Kathryn Nack City of Pasadena, Bev Perry City of Brea, Glenn Norton-Perry City of Chino Hills, Ron Parks City of Temecula, Irr. Pickler City of Anaheim, Michael Plisky City of Oxnard, Beatrice Proo City of Pico Rivera, Larry Rhinehart City of Montclair, Richard Riordan City of Los Angeles, Mark Ridley-Thomas City of Los Angeles, Albert Robles City of South Gate, Sam Sharp Imperial County, Marcine Shaw City of Compton, Rudy Svorinich City of Los Angeles, Tom Sykes City of Walnut, Laurie Tully-Payne City of Highland, Joel Wachs City of Los Angeles, Rita Walters City of Los Angeles, Judy Wright City of Claremont, Zev Yaroslavsky City of Los Angeles ●

COMMENTS ON THE NOTICE OF PREPARATION FOR A DRAFT ENVIRONMENTAL IMPACT REPORT OF THE PROPOSED ANAHEIM SPORTSCENTER

PROJECT DESCRIPTION

The proposed Anaheim SportsCenter (the "Project") is located within the Anaheim Stadium Area in the southerly portion of the City of Anaheim in central Orange County. Regional access to the proposed site is provided by State Route 57 (Orange Freeway) and Interstate 5 (Santa Ana Freeway). Local access is provided by State College Boulevard, Gene Autry Way, Katella Avenue, Douglass Road, and Orangewood Avenue.

The objective of the Project is to develop a plan for the economic development and enhancement of the Anaheim Stadium property. The construction of the new Arrowhead Pond of Anaheim has attracted new fans and visitors to the area, thus providing the City with an opportunity to explore land uses that would be complementary to both the Arena and the Stadium. In addition, ongoing efforts in the nearby Anaheim Resort coupled with the potential Disneyland and Convention Center expansions provide the City with an opportunity to examine linkages between these areas.

The Project Area is already developed and consists of Anaheim Stadium, surrounding surface parking, and Amtrak facilities. The proposed Project will include the renovation of the existing Anaheim Stadium, reconfiguration of the existing 16,000-space parking area, construction of a new 45,000-seat baseball stadium, and complementary land uses comprising a retail/urban entertainment center (retail, entertainment, hotel, etc.) that would provide linkage between Anaheim Stadium, the proposed baseball stadium, the Arrowhead Pond of Anaheim, and the surrounding area.

CONSISTENCY WITH REGIONAL COMPREHENSIVE PLAN AND GUIDE POLICIES

The adopted Growth Management Chapter (GMC) of the Regional Comprehensive Plan and Guide (RCPG) contains the following policies that are particularly relevant to this project¹:

- *The population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.*
- *Support provisions and incentives created by local jurisdictions to attract housing growth in job rich subregions and job growth in housing rich subregions.*

¹ See Endnote.

- *Encourage local jurisdictions' efforts to achieve a balance between the types of jobs they seek to attract and housing prices.*
- *Encourage patterns of urban development and land use which reduce costs on infrastructure construction and make better use of existing facilities.*
- *Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.*
- *Support local jurisdictions' strategies to establish mixed-use clusters and other transit oriented developments around transit stations and along transit corridors.*
- *Encourage developments in and around activity centers, transportation node corridors, under-utilized infrastructure systems and areas needing recycling and redevelopment.*
- *Encourage subregions to define an economic strategy to maintain the economic vitality of the subregion, including the development and use of marketing programs, and other economic incentives, which support attainment of subregional goals and policies.*
- *Encourage planned development in locations least likely to cause adverse environmental impact.*
- *Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage and to develop emergency response and recovery plans.*
- *Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.*

SCAG staff comments. As designated in the GMC, the proposed Project is located in the Orange County subregion, which is jobs-rich. It is projected that this subregion will become more jobs-rich in the coming years. As noted in the NOP, the Project would involve the development of retail and entertainment facilities such as clothing stores, movie theaters, night clubs, hotels, and numerous others. The DEIR should provide calculations for the amount of employment that could be generated by these proposed retail/entertainment land uses in order to facilitate the evaluation of regional impacts of the proposed Project as well as its consistency with regional plans, goals, and policies.

It would also be desirable that the DEIR address the issue of housing availability and affordability, and assess whether there is a good match between the jobs being created and housing prices in the subregion.

The Regional Mobility Chapter of the RCPG also has policies pertinent to this project². This chapter links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. Relevant policies include:

- *Promote TDM [Transportation Demand Management] programs along with transit and ridesharing facilities as a viable and desirable part of the overall mobility program while recognizing the particular needs of individual subregions.*
- *Encourage non-motorized trips.*
- *Support the extension of TDM program implementation to non-commute trips for public and private sector activities.*
- *Support the coordination of land-use and transportation decisions with land-use and transportation capacity, taking into account the potential for demand management strategies to mitigate travel demand if provided for as part of the entire package.*

SCAG staff comments. The DEIR should address the impacts of the proposed project on the existing and proposed future transportation systems and provide an explanation on how TDM measures would be incorporated into the project. SCAG staff suggests that the City specify who would be responsible for monitoring and administering the following: each TDM program, funding sources, and the expected impact and description of VMT/vehicle trip reduction targets for each measure. The goal would be to more actively reduce VMT by helping visitors, fans (during sporting events), and employees become less dependent on single occupant automobiles.

CONCLUSION

All mitigation measures associated with the proposed project should be monitored in accordance with AB 3180 requirements.

² See Endnote.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Roles and Authorities

THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS is a *Joint Powers Agency* established under California Government Code Section 6502 et seq. Under federal and state law, the Association is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). Among its other mandated roles and responsibilities, the Association is:

Designated by the federal government as the Region's *Metropolitan Planning Organization* and mandated to maintain a continuing, cooperative, and comprehensive transportation planning process resulting in a Regional Transportation Plan and a Regional Transportation Improvement Program pursuant to 23 U.S.C. §134(g)-(h), 49 U.S.C. §1607(f)-(g) et seq., 23 C.F.R. §450, and 49 C.F.R. §613. The Association is also the designated *Regional Transportation Planning Agency*, and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080.

Responsible for developing the demographic projections and the integrated land use, housing, employment, and transportation programs, measures, and strategies portions of the *South Coast Air Quality Management Plan*, pursuant to California Health and Safety Code Section 40460(b)-(c). The Association is also designated under 42 U.S.C. §7504(a) as a *Co-Lead Agency* for air quality planning for the Central Coast and Southeast Desert Air Basin District.

Responsible under the Federal Clean Air Act for determining *Conformity* of Projects, Plans and Programs to the State Implementation Plan, pursuant to 42 U.S.C. §7506.

Responsible, pursuant to California Government Code Section 65089.2, for *reviewing all Congestion Management Plans (CMPS) for consistency with regional transportation plans* required by Section 65080 of the Government Code. The Association must also evaluate the consistency and compatibility of such programs within the region.

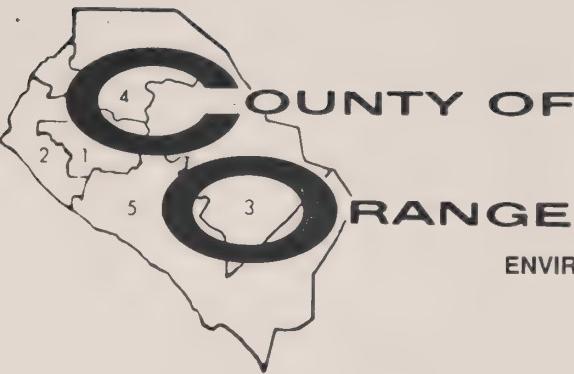
The authorized regional agency for *Inter-Governmental Review* of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12,372 (replacing A-95 Review).

Responsible for reviewing, pursuant to Sections 15125(b) and 15206 of the CEQA Guidelines, *Environmental Impact Reports* of projects of regional significance for consistency with regional plans.

The authorized *Areawide Waste Treatment Management Planning Agency*, pursuant to 33 U.S.C. §1288(a)(2) (Section 208 of the Federal Water Pollution Control Act)

Responsible for preparation of the *Regional Housing Needs Assessment*, pursuant to California Government Code Section 65584(a).

Responsible (along with the San Diego Association of Governments and the Santa Barbara County/Cities Area Planning Council) for preparing the *Southern California Hazardous Waste Management Plan* pursuant to California Health and Safety Code Section 25135.3.



ENVIRONMENTAL MANAGEMENT AGENCY
PLANNING

MAY 18 1995

NCL 95-29

MICHAEL M. RUANE
DIRECTOR, EMA

THOMAS B. MATHEWS
DIRECTOR OF PLANNING

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(714) 834-4643
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DPC: 834-4772

Mr. Greg McCafferty, Associate Planner
City of Anaheim Planning Department
200 South Anaheim Boulevard
Anaheim, CA 92805

SUBJECT: NOP for the Anaheim SportsCenter

Dear Mr. McCafferty:

The above referenced item is a Notice of Preparation (NOP) of a draft Environmental Impact Report (DEIR) for the City of Anaheim. The project is located generally west of the Santa Ana River and the SR-57, south of Katella Avenue, east of State College Boulevard, and north of Orangewood Avenue. The purpose of the project is the renovation of the existing Anaheim Stadium, reconfiguration of the 16,000-space parking area, construction of a potential new 45,000-seat baseball stadium, and complementary development comprising primarily of retail/urban entertainment type uses. The County of Orange has reviewed the NOP and offers the following comments:

CIRCULATION

1. Please transmit a copy of the project's traffic analysis to the County for our review when it becomes available. The traffic analysis should be conducted in accordance with the Measure 'M' and 'CMP' provisions.
2. The project is contiguous to Katella Avenue, State College Boulevard, and Orangewood Avenue, which are designated as principal, major, and primary arterials, respectively, on the Master Plan of Arterial Highways (MPAH). The project planning and development should provide for implementation of these facilities consistent with their MPAH designations.
3. The Master Plan of Countywide Bikeways (MPCB) identifies the following regional bikeways in the project vicinity:

Route 29: A Class II (on-road, striped lanes) bikeway along State College Boulevard and Orangewood Avenue;

Route 36: A Class I (off-road, paved) bikeway along the west levee of the Santa Ana River, adjacent to the project.

We suggest the DEIR address these regional bikeways.

4. In addition, the City of Anaheim, EMA/Transportation, and the Orange County Bicycle Coalition (OCBC) are working together to implement a proposed Class I bikeway connection between the Santa Ana River Trail and the Anaheim Amtrak/Metrolink station. Please address this bicycle trail in the DEIR.
5. Bicycle facilities are mitigation measures to reduce traffic congestion, vehicular noise, and air pollution, in compliance with SCAQMD's Regulation XV, the Air Quality Management Plan, and the Federal Clean Air Act.

AIR QUALITY

6. The air quality analysis for this project should be prepared in accordance with the recommendations of the California Air Resources Board and the South Coast Air Quality Management District.

FLOOD

7. Southeast Anaheim Channel (E12) is an Orange County Flood Control District (OCFCD) Facility adjacent to the project area. This facility is an underground concrete conduit designed to convey the 25-year frequency discharge. The project design should ensure that increases in discharges resulting from the project can be handled safely by the existing OCFCD facility and its tributary storm drains to provide the required protection for the proposed project.
8. All direct or indirect impacts and the associated improvement costs to OCFCD facilities resulting from the proposed project should be the responsibility of the project proponents.
9. Public property permits from Orange County Environmental Management Agency are required when proposed project either impacts OCFCD facilities or are within OCFCD's right-of-way limits.

10. Portions of the proposed development appear to be in a Federal Emergency Management Agency (FEMA) designated floodplain for the Santa Ana River. Until the Santa Ana River Project is completed by the federal government and the floodplain eliminated the appropriate FEMA regulations for work within floodplain areas should be followed.

WATER QUALITY

The DEIR should address:

11. Existing conditions of Receiving Waters as identified in the Santa Ana Region Watershed Basin Plan, with its goals and objectives for surface water quality, and particular emphasis on the water quality in the Santa Ana River.
12. The potential surface water quality impacts of the project should be addressed in the DEIR including but not limited to construction activities, long-term runoff impacts of new impervious surfaces, pesticides and fertilizers applied to landscaping, and future spills from accidents and/or improper business management of chemicals.
13. Mitigations for project impacts should include:
 - A. Preparation of a construction Stormwater Pollution Prevention Plan under State, National Pollutant Discharge Elimination System (NPDES) requirements;
 - B. Incorporation of those construction notes recommended in the Countywide Drainage Area Management Plan (DAMP) New Development Appendix;
 - C. Incorporation of Federal EPA/NOAA guidance measures for coastal nonpoint source pollution;
 - D. Incorporation of other measures from the State Municipal Best Management Practices (BMPs) Manual;
 - E. Development of a long-term post-construction water quality management plan, describing commitments to installation and maintenance of structural facilities and conduct of non-structural BMPs consistent with the DAMP New Development Appendix; and
 - F. Inclusion of flood control improvements whose design is sensitive to surface water quality management.

It may not, however, be assumed that incorporation of these measures will reduce all potential impacts to a level of insignificance, in that no formal CEQA/NEPA analysis was undertaken in connection with their development. For these reasons the use of the Watershed Basin Plan goals and objectives for water quality as design and engineering parameters for master plan development is also recommended.

OPEN SPACE/RECREATION

14. The DEIR should include a discussion of potential impacts, if any, to the Regional Santa Ana River Bicycle and Riding and Hiking Trails. Mitigation measures as appropriate, should be provided, including construction stage mitigation measures.
15. The DEIR, as mitigation for the proposed project, should propose to provide urban edge/landscaping enhancements for the Santa Ana River Trail Open Space Corridor. In addition to landscaping, these should include amenities for trail users such as rest stops, restrooms and drinking fountains.

Thank you for the opportunity to respond to the NOP. Please send one set of the DEIR to Charlotte Harryman at the above address when it becomes available. If you have any questions, please call Ms. Harryman at (714) 834-2522.

Very truly yours,

George Britton, Manager
Environmental/Project Planning Division

BEST, BEST & KRIEGER

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ONTARIO
(909) 989-8584

SAN DIEGO
(619) 595-1333

May 11, 1995



VIA FACSIMILE AND FIRST CLASS MAIL

Mr. Greg McCafferty
Associate Planner
City of Anaheim
200 South Anaheim Boulevard
Anaheim, California 92805

**Re: Notice of Preparation of Draft Environmental Impact Report No. 320
Prepared for Anaheim Sportscenter Project**

Dear Mr. McCafferty:

This law firm is counsel to the Anaheim City School District ("District") and has been asked by the District to provide comments on the Notice of Preparation of Draft Environmental Impact Report No. 320 prepared for the Anaheim SportsCenter project ("Project").

Initially, it should be noted that these comments provide a brief description of the areas of concern for the District. The District would be glad to explore these areas more fully with the City of Anaheim ("City") and to provide any information which may be necessary for the City to fully and adequately explore these issues, as required by CEQA.

The District provides elementary school services to students within the City. The District is concerned about the following issues and requests the City to specifically address them in its draft Environmental Impact Report:

- **Air Quality:** How the Project will impact the air quality in the vicinity of the District's schools through, among other things, construction activities and changed traffic patterns and circulation flows.

- **Transportation/Circulation:** How the changed traffic patterns and circulation flows will impact the District's transportation services, as well as the

Mr. Greg McCafferty
City of Anaheim
May 11, 1995
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transportation of students, teachers and parents to and from all District schools. This analysis should include a specific discussion of how the Project may impact the ability of students and teachers to travel to and from District schools via bicycles and by walking. This analysis should also include a discussion of the safety of such persons.

- **Population/Employment& Jobs/HousingBalance:** How the Project will increase the population of students requiring the District's services. This analysis should specifically address the impact caused by new employees whose children will attend District schools, and should take into account the demographics of the City and District populations.
- **Noise:** How the Project will impact the noise quality in and around District schools, through short-term construction activities and long-term uses.
- **Public Services (Schools):** How the Project may increase the demand on the District's schools. This analysis should utilize current District data. In addition, since this legislative land use project is not limited to statutory developer fees to mitigate impacts on schools, this analysis should also specifically and fully discuss all potential mitigation measures, including, but not necessarily limited to, the following: (a) adding language in the City's General Plan that would mandate mitigation of school impacts prior to project approval; (b) the issuance of bonds; (c) City and District agreements for school services and facility provisions; (d) developer and District agreements for impact mitigation; (e) the dedication of land for school use; (f) financing of transportation costs to bus students; (g) financing of costs associated with construction or expansion of needed school facilities; (h) the phasing or downsizing of the Project to coordinate with local public services and schools; (i) the provision of temporary classrooms; and (j) the formation of a Mello Roos District.
- **Growth Inducing & Cumulative Impacts:** How this Project impacts the demand for District services when looked at in conjunction with other past projects approved by the City, other current projects, and probable future projects. The cumulative impacts analysis should specifically address the incremental effects of the several projects on school services, and the extent to which statutory developer fees alone are insufficient to mitigate these impacts. In addition, this analysis should address how the growth-inducing effects of the Project specifically impact District services.

The District will provide the City under separate cover its most recent enrollment figures, as well as its most current fee justification study entitled "Development Fee Justification Analysis for Residential Development, Commercial/Industrial Development and Senior Housing."

LAW OFFICES OF
BEST, BEST & KRIEGER

Mr. Greg McCafferty
City of Anaheim
May 11, 1995
Page 3

Thank you for this opportunity to assist in defining the scope and content of the Environmental Impact Report for the Project. If you should have any questions, please call me at (909) 686-1450.

Sincerely,



Dean Derleth
for Best, Best & Krieger
Counsel, Anaheim City
School District

DRD/irs

cc: Dr. Meliton Lopez, Superintendent

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May 11, 1995

VIA FACSIMILE AND FIRST CLASS MAIL

Mr. Greg McCafferty
Associate Planner
City of Anaheim
200 South Anaheim Boulevard
Anaheim, California 92805

**Re: Notice of Preparation of Draft Environmental Impact Report No. 320
Prepared for Anaheim Sportscenter Project**

Dear Mr. McCafferty:

This law firm is counsel to the Anaheim Union High School District ("District") and has been asked by the District to provide comments on the Notice of Preparation of Draft Environmental Impact Report No. 320 prepared for the Anaheim SportsCenter project ("Project").

Initially, it should be noted that these comments provide a brief description of the areas of concern for the District. The District would be glad to explore these areas more fully with the City of Anaheim ("City") and to provide any information which may be necessary for the City to fully and adequately explore these issues, as required by CEQA.

The District provides high school and junior high school services to students within and outside of the City. The District is concerned about the following issues and requests the City to specifically address them in its draft Environmental Impact Report:

- **Air Quality:** How the Project will impact the air quality in the vicinity of schools through, among other things, construction activities and changed traffic patterns and circulation flows. This analysis should include District schools within and outside of the City.

Mr. Greg McCafferty
City of Anaheim
May 11, 1995
Page 2

• **Transportation/Circulation:** How the changed traffic patterns and circulation flows will impact the District's transportation services in and outside of the City, as well as the transportation of students, teachers and parents to and from all District schools. This analysis should include a specific discussion of how the Project may impact the ability of students and teachers to travel to and from District schools via bicycles and by walking. This analysis should also include a discussion of the safety of such persons.

• **Population/Employment& Jobs/HousingBalance:** How the Project will increase the population of students requiring the District's services. This analysis should specifically address the impact caused by new employees whose children will attend District schools both in and outside of the City limits, and should take into account the demographics of the City and District populations.

• **Noise:** How the Project will impact the noise quality in and around District schools, through short-term construction activities and long-term uses.

• **Public Services (Schools):** How the Project may increase the demand on the District's schools. This analysis should utilize current District data. In addition, since this legislative land use project is not limited to statutory developer fees to mitigate impacts on schools, this analysis should also specifically and fully discuss all potential mitigation measures, including, but not necessarily limited to, the following: (a) adding language in the City's General Plan that would mandate mitigation of school impacts prior to project approval; (b) the issuance of bonds; (c) City and District agreements for school services and facility provisions; (d) developer and District agreements for impact mitigation; (e) the dedication of land for school use; (f) financing of transportation costs to bus students; (g) financing of costs associated with construction or expansion of needed school facilities; (h) the phasing or downsizing of the Project to coordinate with local public services and schools; (i) the provision of temporary classrooms; and (j) the formation of a Mello Roos District.

• **Growth Inducing & Cumulative Impacts:** How this Project impacts the demand for District services when looked at in conjunction with other past projects approved by the City, other current projects, and probable future projects. The cumulative impacts analysis should specifically address the incremental effects of the several projects on school services, and the extent to which statutory developer fees alone are insufficient to mitigate these impacts. In addition, this analysis should address how the growth-inducing effects of the Project specifically impact District services.

The District will provide the City under separate cover its most recent enrollment figures, as well as its most current fee justification study entitled "Comprehensive Study of the Impact of Development and Fee Justification Program."

LAW OFFICES OF
BEST, BEST & KRIEGER

Mr. Greg McCafferty
City of Anaheim
May 11, 1995
Page 3

Thank you for this opportunity to assist in defining the scope and content of the Environmental Impact Report for the Project. If you should have any questions, please call me at (909) 686-1450.

Sincerely,



Dean Derleth
for Best, Best & Krieger
Counsel, Anaheim Union
High School District

DRD/irs

cc: Ms. Cynthia Grennan, Superintendent



CITY OF ORANGE



DEPARTMENT OF PUBLIC WORKS - TRAFFIC ENGINEERING - (714) 744-5540

FAX (714) 744-6961

April 20, 1995

Mr. Greg McCafferty, Associate Planner
City of Anaheim
Planning Department
200 South Anaheim Boulevard
Anaheim, California 92805

Dear Mr. McCafferty:

As staff for the City of Orange, we appreciate the opportunity to comment on the Notice of Preparation (NOP) for the Anaheim Sportscenter Environmental Impact Report while the project is still in its infancy.

After reading the NOP, there are two issues which we feel are very important, and deserve thorough examination.

Adequate parking is vital to the success of this project. Previous projects in this area (i.e.: The Pond) have assumed very optimistic vehicle passenger rates which have resulted in parking deficiencies in the area. More realistic vehicle passenger rates will allow for a more accurate calculation of parking space needs, and prevent the parking shortages which have occurred in the past.

The other issue of importance to the City of Orange is how the project traffic affects arterials and intersections within Orange. We request that the following intersections in Orange be included in peak hour analyses for each phase of development.

- SR-57 Fwy. S/B Ramps & Orangewood Ave.
- SR-57 Fwy. N/B Ramps & Orangewood Ave.
- Eckhoff St. & Orangewood Ave.
- Main St. & Orangewood Ave.
- Main St. & Katella Ave.

Once again, thank you for including the City of Orange in the NOP process. We look forward to reviewing the draft document on this project when it becomes available.

Sincerely,

Doug Keys
Assistant Transportation Engineer

DK:st

File Name: DKMCCAFF (Disk #2)

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ORANGE, CA 92666-1591

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(714) 283-1394 • Fax (714) 282-3949

April 24, 1995

Mr. Greg McCafferty
Associate Planner
City of Anaheim Planning Dept.
200 South Anaheim Blvd.
Anaheim, CA 92805

Re: EIR No. 320

Dear Mr. McCafferty:

We are in receipt of your notice dated April 7, 1995, "Notice of Preparation of Environmental Impact Report No. 320 Anaheim Sportscenter." As you are aware, Tejas Partners are most concerned about both the positive as well as the negative impact which is contemplated by this study.

We have worked diligently with the City of Anaheim regarding traffic issues as they relate to the Anaheim Arena and will continue to work with the City on all future issues. Since I am personally involved with such traffic issues on dates when there are events at the Arena, it makes it difficult for me to attend this first meeting, April 26, 1995 at 6:00p.m., the Mighty Ducks are entertaining the San Jose Sharks.

Again, I would be most happy to provide whatever time or talents I can to benefit the City for the enhancement of the Anaheim Sportscenter area.

Sincerely,



J. Michael Moore

APPENDIX B
PUBLIC SERVICES AND UTILITIES TECHNICAL REPORT

ANAHEIM SPORTS CENTER EIR

PUBLIC SERVICES AND UTILITIES TECHNICAL REPORT

Prepared By:



IWA Engineers
17390 Brookhurst St., Suite 100
Fountain Valley, CA 92708

Prepared For:

Michael Brandeman Associates
17310 Redhill Avenue, Suite 250
Irvine, CA 92714

January 1996

ANAHEIM SPORTS CENTER EIR

PUBLIC SERVICES AND UTILITIES TECHNICAL REPORT

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B Drainage Calculations

A Land Use Alternatives

The project would involve the implementation of a new 45,000 seat baseball stadium and a renovated 70,500 seat Anaheim Stadium for football (or) a new 70,500 seat football stadium and a renovated 45,000 seat Anaheim Stadium for baseball (See Exhibits A-1 and A-2 respectively). Although the project would introduce an additional 45,000 seats onsite, the stadiums presented in these scenarios would not operate at the same time. Only one of the events can occur on the property on any given day. The proposed new land uses (retail, commercial, hotels etc.) would contribute to an overall increase in the demand for onsite utilities. Please note that the project also assumes that use of the existing exhibition center space would only occur during non stadium event times. Therefore, the exhibition center would not contribute to the project's projected maximum demand and/or generation for utilities.

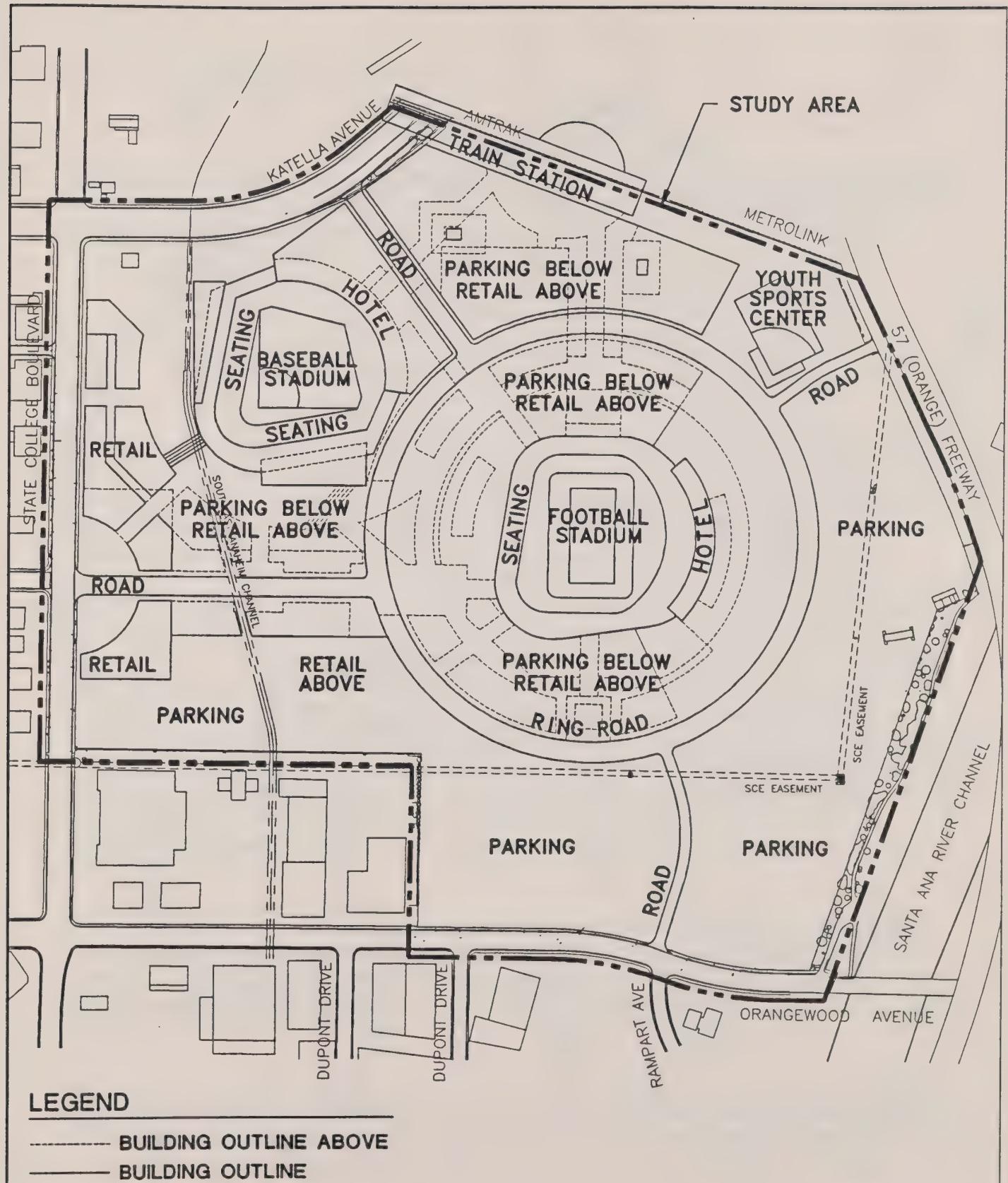


EXHIBIT A-1
PROPOSED LAND USE PLAN
ALTERNATE 1
ANAHEIM SPORTS CENTER

IWA ENGINEERS
 17390 BROOKHURST, SUITE 100
 FOUNTAIN VALLEY, CA 92708



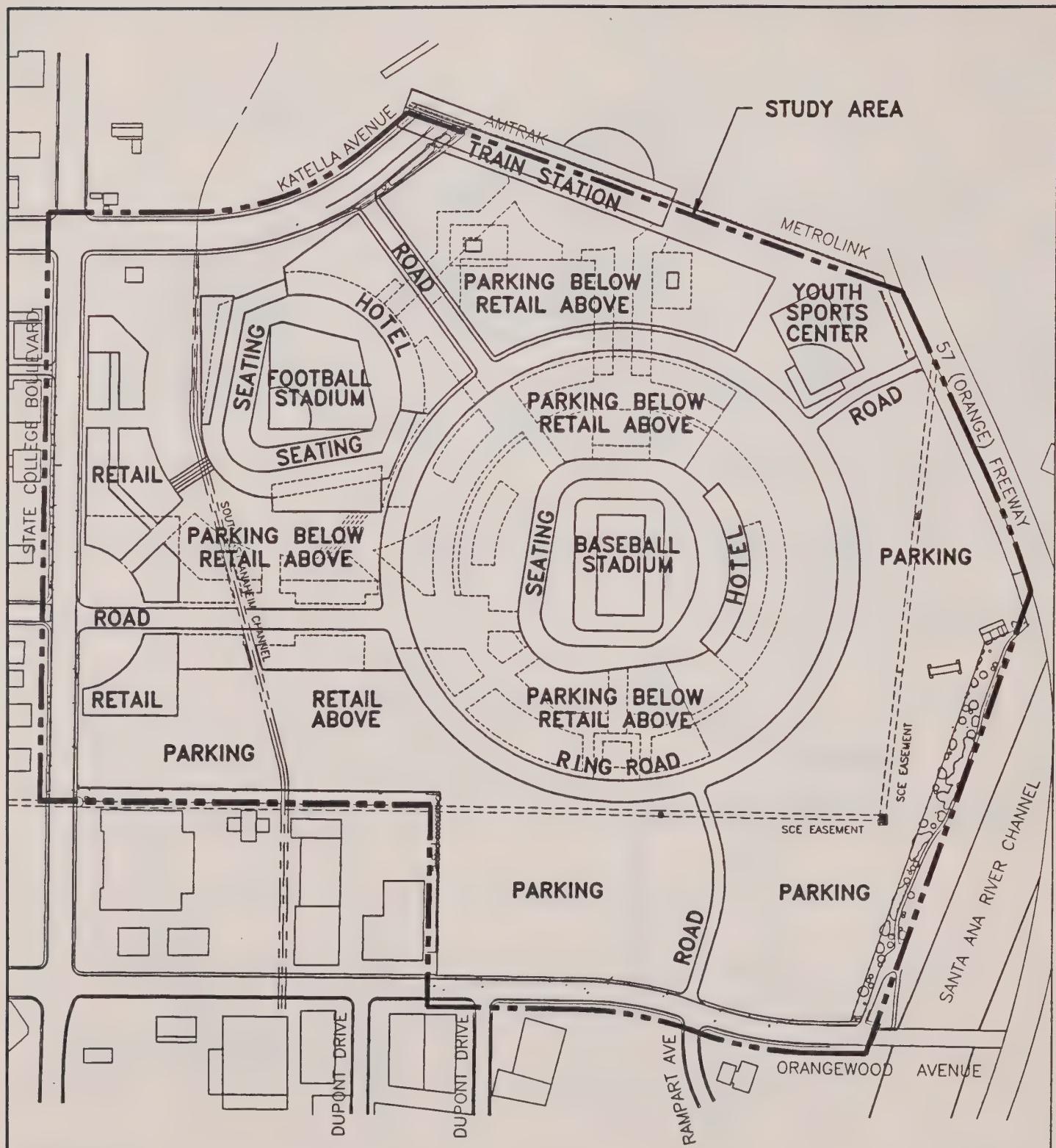


EXHIBIT A-2
PROPOSED LAND USE PLAN
ALTERNATE 2
ANAHEIM SPORTS CENTER

IWA ENGINEERS
 17390 BROOKHURST, SUITE 100
 FOUNTAIN VALLEY, CA 92708



I. WATER

This section addresses the water distribution system serving the Development Program Plans (DPP) outlined in Exhibits A-1 and A-2. For the purpose of this analysis these DPP alternatives have the same effect on the water system.

Environmental Conditions

Regional Setting

Water

Water service is provided to the Project Site area by the City of Anaheim Public Utilities Department, Water Division. The majority of the City's water (approximately 70 percent) is pumped from the local groundwater basin. The water for the local groundwater basin is supplied through storm water infiltration and recharge basins. As back-up for the wells, the City purchases additional water from the Metropolitan Water District (MWD).

MWD is a wholesale water agency responsible for providing supplemental water (water from a source other than local groundwater and surface water) to water agencies within its service area. MWD supplies imported water to Southern California. The imported water comes from northern California and the Colorado River. MWD contracts for this water from the State Water Project (SWP). As a wholesale agency, MWD finances, constructs, and operates the pipelines and other facilities to transport the State water from its source to the wholesaler's area of service. Water purveyors, such as the City of Anaheim Public Utilities Department, Water Division, contract with MWD for water. Purveyors transport the water from the wholesale agency's storage facility or from turnouts (connection points) on the wholesaler's distribution pipeline and provide water service to their retail clients.

Well No. 33, the closest source of groundwater serving the Project Site, has operated for 30 years at the intersection of Stadium Way and Stadium Center Drive. The well produces an average of 1,080 gallons per minute and is 469 feet deep. A connection to the MWD system near the intersection of Cerritos Avenue and Lewis Street provides back-up service for the well.

Well No. 33, the existing MWD connections, and the distribution lines are capable of supplying the existing maximum day demands and peak hour demands to the Project Site. However, new wells will be necessary in the future in order to compensate for diminishing production from older wells serving the area.

Of the domestic water used in north Orange County, 70% is currently derived from the groundwater basin managed by Orange County Water District (OCWD). OCWD prepared

a Groundwater Management Plan (GWMP) in 1994. The GWMP defines goals for the next 20 years, such as increasing basin water supplies, protecting and enhancing water quality, and improving basin management. The purpose of implementing the GWMP is to increase reliance on local sources rather than on less dependable imported water. OCWD believes the use of local supplied water could increase from the current level of about 70% to 90% by 2010 if all baseline and potential projects envisioned in the GWMP are completed. The benefits of this plan are reduced dependency on imported supplies, protection from drought and shortage and increased use of lower cost sources.

Water Quality

Water pumped from Santa Ana River Basin wells is naturally filtered in the underlying sand, rock strata and soil. This water is generally delivered directly into the transmission and distribution mains. Groundwater pumped into the City's reservoirs is disinfected to assure sanitary quality. Treated water purchased from the MWD of Southern California is filtered and disinfected at MWD's Dirmer treatment plant in Yorba Linda. Both untreated Colorado River water and State Project water purchased from MWD is received at the City's Walnut Canyon Reservoir via connections with MWD's Santiago Lateral. The water is, in turn, filtered and disinfected at the City's August F. Lenain Filtration Plant before distribution. This treatment process results in water quality which meets or exceeds drinking water standards.

Analysis for organic chemicals is routinely performed on all the City's drinking water wells and treatment plants. Nineteen wells out of thirty wells tested show at least trace amounts of contamination with volatile organic chemicals. Two of these wells are out of service because they exceed the maximum contaminant level (MCL) for trichloroethylene ("TCE"). Thirteen wells show trace amounts of freon compounds and eleven wells have trace amounts of herbicides. Eighteen wells show trace amounts of other organic chemicals. These wells remain in operation as the trace amounts continue to meet drinking water standards.

Organic chemicals produced during the disinfection process are routinely monitored. Currently, the rolling quarterly average concentration of Total Trihalomethanes's (TTHM's) is 37.8 micrograms per liter (up/L). The current MCL for TTHM's is 100 ug/L.

Past agricultural practices have left their mark in the form of contamination of the upper aquifers with mineral salts such as nitrates. Degradation of ammonium compounds from fertilizers produce nitrates which are regulated at a MCL of 45 milligrams per liter (mg/L), same as parts per million (ppm). Over the years, old shallow wells producing from the upper aquifer have been replaced with new deeper wells producing a higher quality water. One old well was recently taken out of service for approaching the nitrate MCL.

Public Services and Utilities Technical Report

The City is participating with the Orange County Water District in researching new treatment techniques to mitigate nitrate contamination and is actively pursuing a replacement program of old shallow wells with new deeper ones.

City water is sampled and tested over 2,500 times each month. Since 1966, the City has operated its own water quality laboratory to facilitate constant surveillance of water quality as it is being produced, stored, distributed and finally consumed at the tap. The City's water quality laboratory takes samples of water from wells and distribution system and performs more than 2000 tests monthly. The City's water quality monitoring program is staffed and operated in accordance with Title 22, Chapter 15, of the California Administrative Code. To date, the City has, and continues to supply, drinking water meeting all Federal, State and County drinking water regulations.

Reclaimed Water

In attempting to develop a reclaimed water supply for northern Orange County, OCWD and County Sanitation Districts of Orange County (CSDOC) are jointly designing the Orange County Regional Water Reclamation Project (OCR Project). This project will produce reclaimed water while its primary dedication will be to groundwater recharge at OCWD's existing recharge facilities in the City of Anaheim. It is expected the OCR Project will produce 50,000 acre-feet per year by the year 2000 and an additional 25,000 acre-feet per year by the years 2010 and 2020. The proposed pipeline alignment is along the Santa Ana River Channel and will extend from the OCWD/CSDOC facilities in Fountain Valley to the OCWD recharge facilities in Anaheim.

The CSDOC currently reclaims up to 15 mgd of secondary treatment water from the Fountain Valley Plant which is purified at the Orange County Water District Factory 21. The purified water is injected into the groundwater table to block seawater intrusion. The CSDOC supplies industrial users with reclaimed water. Additionally, the CSDOC has proposed plans to reclaim an additional 15 mgd for industrial use and landscape irrigation.

Local Setting

The Project Site area is bounded by water mains in Orangewood Avenue, State College Boulevard and Katella Avenue (refer to Exhibit I-1). The distribution lines are: 12" in Katella Avenue, 12" in State College Boulevard, and lines ranging from 6" to 12" in Orangewood Avenue. The existing Anaheim Stadium is serviced by all three of these service lines in a looped system. These service lines are supplied with water by Well No. 33. Well No. 33 is located on the property of Anaheim Stadium.

Environmental Impacts

As indicated previously, the project would include the implementation of one of two land use alternatives (i.e., Land Use Alternative 1 and Land Use Alternative 2). Implementation of Land Use Alternative 2, which assumes construction of a new 70,500 seat football stadium and renovation of the existing Anaheim Stadium to 45,000 seats for baseball would provide for a greater demand for water than under Land Use Alternative 1. More specifically, the stadiums would not operate at the same time under the DPP; however, implementation of a new 70,500 seat football stadium would require the need for more water than what is currently required by the existing Anaheim Stadium due to an increased number of fixtures (sinks, toilets, etc.). Therefore, this would result in a greater demand for water services and facilities.

In order to accurately determine the project's projected maximum water demand, the methodological assumption used assumes the difference between the amount of water currently required by the existing stadium and the proposed demand of the new 70,500 seat football stadium, in conjunction with all other planned new uses. Table I.1 identifies the project's water demand.

Most of the land uses in the DPP are standard uses such as retail, offices, etc. Stadium facilities place unique demands on utility systems. The system peaks for approximately three hours per function. Functions do not occur on a daily basis; therefore, a peaking factor is not applied to this use.

Projected Consumption

Table I.1 shows the projected average daily water demand for the proposed project. Total water consumption for the Project Site will consist of domestic demands and landscape irrigation.

The peak water utilization time for the DPP major uses do not coincide with water uses outside the project study area. Water demands for the sport venues will occur in the evenings whereas the various uses (entertainment/retail and restaurants) will most likely occur throughout the day. Therefore, the peak demands will not occur when both of these uses occur at the same time.

The peak domestic demands for each facility will not occur at the same time; peak hour for hotels is between 9:00 a.m. and 10:00 a.m., peak hour for commercial office buildings is between 10:00 a.m. and 11:00 a.m., peak hour for retail is between 2:00 p.m. and 3:00 p.m., and peak period for the existing Anaheim Stadium is between 8:00 p.m. and 10:00 p.m. However, in order to evaluate the proposed pipe system in the project area, the domestic flows were combined and considered to peak simultaneously.

Public Services and Utilities Technical Report

The construction of the DPP will require the existing water system be replaced with the proposed system as outlined in Exhibit I-2, Proposed Water System. The DPP also eliminates the existing uses at the southeast corner of State College Boulevard and Katella Avenue. The DPP will also increase the amount of landscaped areas currently on the site. A large portion of the site is currently parking lot which will be converted to landscaped areas. These landscaped areas will include a grass parking lot, the new stadium field and a variety of new landscaped medians throughout the site. These new landscaped areas will increase the irrigation usage for the site.

From the analysis outlined in Table I.1, Projected Average Daily Water Demand, the existing maximum average day domestic water demand is 0.298 million gallons per day. The total project net demand for the proposed project is estimated at 0.665 million gallons per day. The existing systems servicing the site are capable of supplying the projected maximum day demands to the Project Site. The projected maximum capacity of the on-site system is 9.554 million gallons per day (calculated for the proposed 16" line at 20 psi). Therefore the remaining capacity in the onsite system is 8.889 (9.554-0.665) million gallons per day. However, due to diminishing production from older wells in this area this conclusion may change with time.

A new well will be necessary in order to compensate for diminishing production from older wells serving this zone. Improvements to the conveyance infrastructure in the area of the proposed project will also be necessary to serve the proposed project.

Fire Flow

The adequacy of fire flow protection for a given area is based on required fire flow, response distance from existing fire stations, and the City of Anaheim Fire Department's judgment of needs in an area. Required fire flow is closely related to land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazard. According to the Anaheim Fire Department, improvements to the water system in this area will not be required as the system presently can provide 6,000 gpm for the 2-hour fire incident at 20 psi. According to the City of Anaheim Fire Department, 6,000 gpm is required for fire flow in non-sprinkler buildings. For buildings with sprinkler systems, the requirement is 4,000 gpm. Proposed buildings will be designed with sprinklers for fire protection. Fire flows have not been considered in the water demand calculations. Because fire flow demands are intermittent and variable, it is standard industry practice not to consider fire flow in demand calculations. In evaluating the water system, the City will add the fire flow demand to the maximum day demand to determine the pipe sizes.

Project Design Features

The DPP will be developed with dual piping onsite to utilize reclaimed water when it is available from the County Sanitation Districts of Orange County (CSDOC).

With development of the DPP, the existing onsite piping system will be upgraded. With this new onsite piping system, particular piping systems in the surrounding streets will be upgraded. Development of the proposed project will also require project specific improvements and inclusion of previously contemplated City improvements. These previously contemplated improvements are included in the City of Anaheim Five-Year Water System Plan. The following improvements are included in the development of the DPP and were prepared in coordination with City staff (refer to Exhibit I-2):

- An onsite 16-inch and 12-inch domestic water line looping system will be installed through the proposed Project Site. This looped system will join with the existing water lines in Orangewood Avenue, State College Boulevard and Katella Avenue.
- A separate reclaimed water system will be installed parallel to the proposed domestic water system. This system will include line sizes ranging from 12 inches to 6 inches.

The City will prepare its own hydraulic network analysis for this proposed system with the addition of the mitigation measures below.

Methodology

This study identifies the potential impacts on the water supply and distribution system resulting from the build-out of the DPP. Based on specific generation factors for water service (see Table I.1), the future water demand is projected for the DPP to be completed.

As part of the methodology it is assumed that two major sporting events will not occur in the same day. Therefore, only one stadium is used in the projected demand calculations.

Generally, water demands are approximately 10 to 20 percent higher than sewer demands. For the purposes of this report and due to the unique sewer flow characteristics of a stadium this generalization does not apply to this report. This demand differs greatly from the sewer demand due to the different analysis techniques. For the water analysis an average day demand was used and for the sewer peak flows were calculated. For further discussion of sewer methodology please refer to the sewer section.

Given the existing capacity of the water system and projected future demand, an assessment was made of the water system impacts. Where project impacts exceed the

supply capacity of the existing system, specific improvements have been recommended in this section to mitigate those impacts.

The water distribution and supply system was evaluated by determining existing physical features and capacities of the system. Information was obtained from City of Anaheim as needed to define the existing systems capacities to deliver water to the property. The future maximum water demand flows were determined based on water generation factors from building square footage and specific use of buildings. Pipelines were sized to maintain flow velocities between 3-8 fps. Meetings were held with the City of Anaheim regarding the proposed improvements and the results are included in this report.

Mitigation Measures

Mitigation Measure No. 1 - New Well No. 45 will be installed to replace the existing Well No. 33. This well will serve as a major source of supply for the DPP. This new well will be installed near the intersection of Katella Avenue and the proposed Project Site access from Katella Avenue (refer to Exhibit I-2). The well is expected to produce in the vicinity of 3,000 gallons per minute and will be approximately 1400' deep.

Mitigation Measure No. 2 - An offsite 16" domestic water line will replace a portion of the existing 12" line in State College Boulevard. This 16" line will complete the looped system created onsite. This new line in State College Boulevard will extend from Gene Autry Way to the existing connection in Katella Avenue.

Mitigation Measure No.3 - The existing Well No. 33 will be removed.

Mitigation Measure No.4 - A new 16-inch pipeline will be constructed in Katella Avenue from Well No. 45 to the existing 18-inch line at the intersection of Katella Avenue and State College Boulevard. This new pipeline will complete a loop with the sites proposed and surrounding system.

Mitigation Measure No.5 - Water conservation will be an important part of DPP, and it will be achieved through numerous measures intended to reduce water consumption.

The City of Anaheim adopted the Landscape Water Efficiency Guidelines with certain voluntary and mandatory landscape requirements. This ordinance is in compliance with the State of California Water Conservation in Landscaping Act (AB325). Among the measures to be implemented with the DPP area are the following:

- Use of water-conserving landscape plant materials wherever feasible;

- Use of vacuums and other equipment to reduce the use of water for wash down of exterior areas;
- Low-flow fittings, fixtures and equipment including low flush toilets and urinals;
- Use of self-closing valves for drinking fountains;
- Use of efficient irrigation systems such as drip irrigation and automatic systems which use moisture sensors;
- Infrared sensors on sinks, toilets and urinals;
- Low-flow shower heads in hotels;
- Infrared sensors on drinking fountains;
- Use of irrigation systems primarily at night, when evaporation rates are lowest;
- Water-efficient ice machines, dishwashers, clothes washers, and other water using appliances;
- Cooling tower recirculating system;
- Use of low flow sprinkler heads in irrigation system;
- Use of waterway re-circulation systems;
- Provide information to the public in conspicuous places regarding water conservation.
- Use of reclaimed water for irrigation and washdown when it becomes available.

In connection with submittal of landscape and building plans, the applicant shall identify which of these measures have been incorporated into the plans.

Mitigation Measure No. 6 - Prior to issuance of the first building permit, the applicant shall enter into an agreement with the City of Anaheim to pay all water fees associated with the project.

Significant Unavoidable Adverse Impacts

Public Services and Utilities Technical Report

Implementation of the project design features and mitigation measures listed above will reduce the impact on the water supply system to a level not considered significant.

Cumulative Impacts

The relevant study area is defined to encompass the water distribution system located east of the I-5 that is within the 335-zone (static HGL) pressure zone.

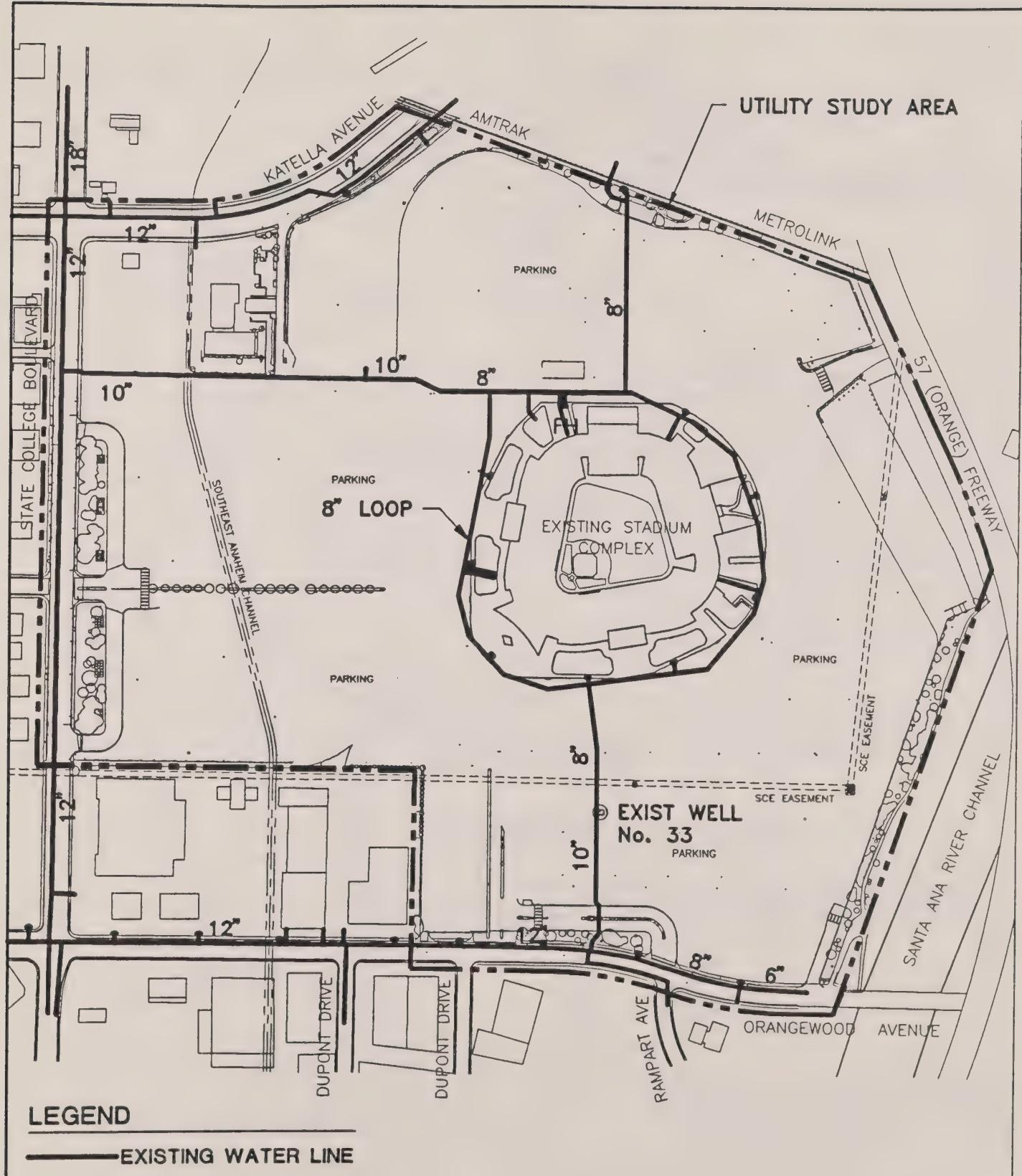
During periods of drought, regional water demand may be greater than natural replenishment of water reserves, resulting in a drawdown of stored water captured for water supply use. During such periods, increased water demands from the project will contribute to such drawdown as will any and all other future increases in regional water demand. While this potential impact may be cumulative during drought periods, replenishment of water supplies when conditions return to normal or during wet periods will eliminate any such impacts. This impact will be further mitigated by the institution of the OCR Project which will supply reclaimed water to the Anaheim area thus reducing the need for potable water supplies.

Sources:

- A. City of Anaheim
 Public Utilities Department
 1994-1999 Five-Year Water System Plan
 Prepared By: Water Services of Anaheim

TABLE I.1
PROJECTED AVERAGE DAILY WATER DEMAND

Component	Unit	Factor	Consumption Rate (gallons per day)(1)	Water Demand (million gallons per day)			
Existing Land Use							
1. Anaheim Stadium	70,500 seats	4	0.282				
2. Commercial/Office (At the Southeast corner of St. College and Katella)	55,140 sf	80	0.004				
3. Exhibition Center	150,000 sf	80	0.012				
	Existing Demand			0.298			
Proposed Land Use							
1. New Stadium (3)	40,500 seats	0	0.170				
2. Urban Entertainment/Retail	750,000 sf	80	0.060				
3. Office	900,000 sf	240	0.216				
4. Hotel #1 (385,000 sf)	350 rooms	180	0.063				
5. Hotel #2 (165,000 sf)	150 rooms	180	0.027				
6. Youth Sports Center	750 seats	4	0.003				
7. Landscape/Irrigation (2)	16.8 acres	7,760	0.130				
Existing Uses to be Removed							
1. Commercial/Office (At the Southeast corner of St. College and Katella)	55,140 sf	-80	-0.004				
	Total Project Net Demand			0.665			
NOTES							
(1) Consumption rates are based per 1,000 square feet where applies.							
(2) Consumption rate is derived from 0.29"/day/acre=0.13"/day. Proposes 2" per week or 0.29"/day per Disneyland Expansion Report.							
(3) This use is not included in the projected demand since the stadiums will not operate concurrently but there is an increase in water demand. This increase is due to the newer stadiums having a higher fixture unit count than the old stadiums.							

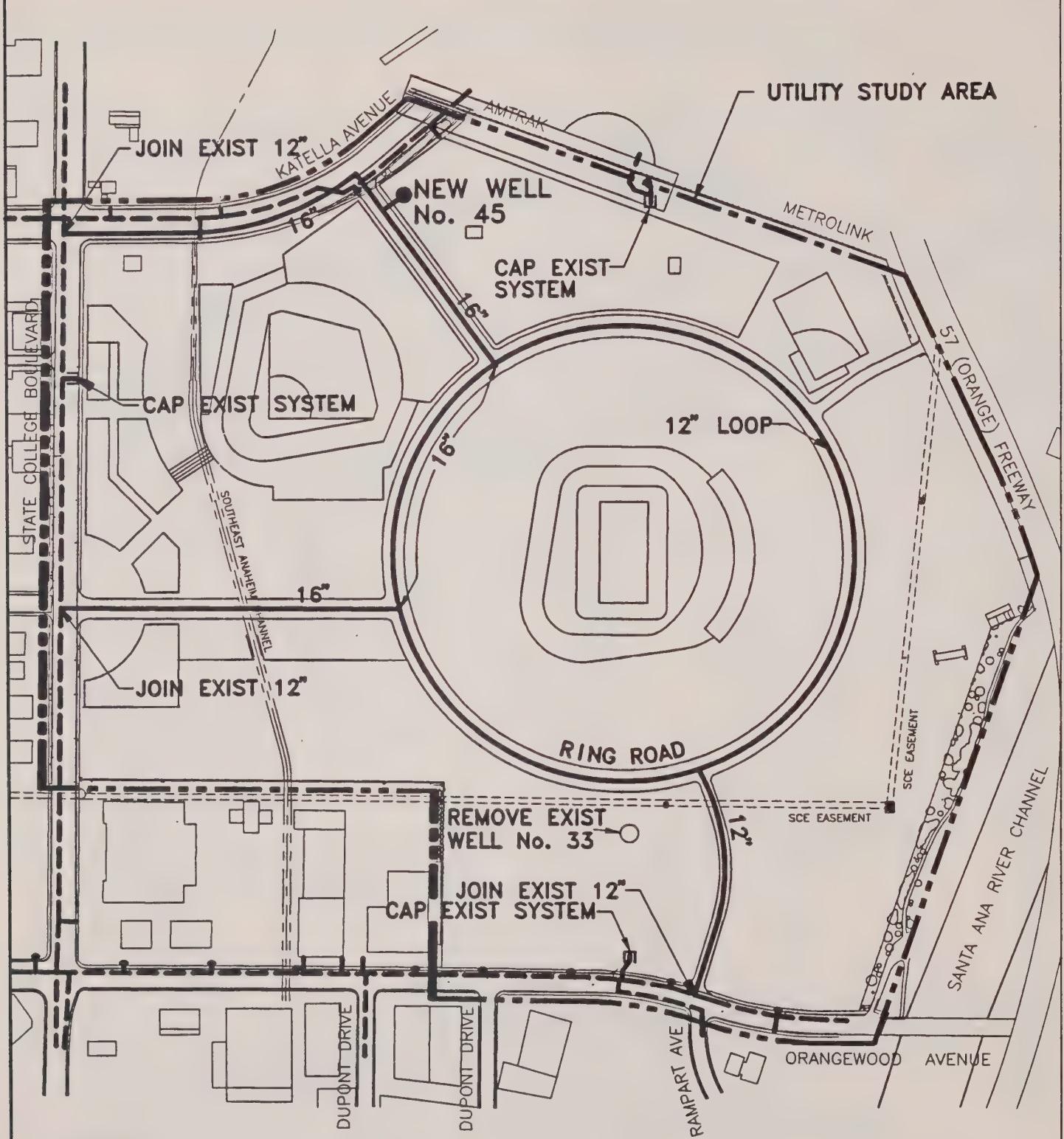


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EXHIBIT I-1
EXISTING WATER SYSTEM
ANAHEIM SPORTS CENTER





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17390 BROOKHURST, SUITE 100
FOUNTAIN VALLEY, CA 92708



EXHIBIT I-2
PROPOSED WATER SYSTEM
ANAHEIM SPORTS CENTER

II. WASTEWATER/SEWER SERVICE

This section addresses the wastewater distribution system serving the Development Program Plans (DPP) as outlined in Exhibits A-1 and A-2.

Environmental Conditions

Regional Setting

The City of Anaheim local sanitary sewer system serves the project vicinity, and is a tributary to the County Sanitation District of Orange County (CSDOC). The CSDOC consists of nine subdistricts encompassing 439 square miles. Wastewater from the City sewer system is conveyed to the trunk and interceptor sewers to regional treatment and disposal facilities. The CSDOC interceptor sanitary sewer serving the Anaheim area flows west through Garden Grove to the District's Treatment Plant No. 1 in Fountain Valley. Plant Number 1 has a total capacity of 60 million gallons per day (mgd). The Fountain Valley plant, along with Treatment Plant Number 2 in Huntington Beach, treats wastewater from 24 Orange County cities and unincorporated County areas. Together the treatment plants process more than 270 mgd of wastewater. Approximately 80 percent of the total effluent is generated by residential uses. The balance comes from industrial or commercial sources. Treated effluent is discharged into the Pacific Ocean. Future CSDOC expansion plans include the construction of three upstream water reclamation plants with a capacity of 43 mgd and development of a water reclamation system for irrigation in the Anaheim area. The CSDOC also plans to expand Plant Number 1 in Fountain Valley to process 120 mgd of wastewater.

The CSDOC currently reclaims up to 15 mgd of secondary treatment water from the Fountain Valley Plant which is purified at the Orange County Water District Factory 21. The purified water is injected into the groundwater table to block seawater intrusion and supplies reclaimed water for industrial irrigation uses. The CSDOC has proposed plans to reclaim an additional 15 mgd for industrial use and landscape irrigation.

Local Setting

The Project Site is currently served by the CSDOC Newhope-Placentia 42-inch trunk sewer in State College Boulevard, the CSDOC Orangewood Diversion 48-inch sewer main in Orangewood Avenue and the CSDOC Santa Ana River Interceptor 78-inch sewer trunk underneath the Santa Ana River (See Exhibit II-1).

The westerly portion of the Project Site conveys flows via a 15-inch line which discharges into the 42-inch Newhope-Placentia Trunk in Katella Avenue. This 15-inch line contains

a siphon to convey flows underneath the Southeast Anaheim Channel Facility E12 (SACF E12), an 11' by 9' concrete box which conveys storm water from areas north of the site. The current flows in this line is calculated at 0.226 mgd (million gallons per day), 0.350 cfs (cubic feet per second) and 157 gpm (gallons per minute).

The Newhope-Placentia Trunk flows southerly towards Orangewood Avenue where some of the flow is diverted into the Orangewood Diversion Sewer. According to the CSDOC 1989 Trunk System Deficiencies Plan, the Newhope-Placentia trunk is deficient in conveying existing flows downstream of the Project Site. The Orangewood Diversion Sewer was built in 1991 to alleviate this deficiency.

The 48-inch Orangewood Diversion Sewer flows easterly and is located in Orangewood Avenue between State College Boulevard and the Santa Ana River. The Orangewood Diversion Sewer conveys a portion of the flow from the Newhope-Placentia Trunk to the Santa Ana River Interceptor. According to discussions with the CSDOC the Orangewood Diversion Sewer is currently operating below capacity and, in conjunction with the Newhope-Placentia Trunk, there is sufficient capacity to accommodate flows from the Project Site.

The easterly section of the Project Site utilizes a 12-inch sewer line to convey flows to the 78-inch Santa Ana River Interceptor (SARI). There is no existing data on the current available capacity in this line. It is assumed that this sewer line was designed to operate at 50% of its full capacity. With this criteria, the calculated current peak flow within this line is 1.466 cubic feet per second.

The SARI flows southerly and is located underneath the Santa Ana River Flood Control Channel. According to discussions with the CSDOC the SARI is currently operating below capacity and has sufficient capacity to accommodate flows from the Project Site.

There is no breakdown of the existing flows in each line. These lines would need to be metered in order to determine their respective existing flows. All of the sewer flows from the lines above discharge into the CSDOC Reclamation Plant No.1.

Environmental Impacts

The CSDOC is currently updating their 1990 sewer deficiency study which will determine any existing deficiencies that may exist in the current system. This is expected to be completed in early 1996.

As indicated previously, the project would include the implementation of one of two land use alternatives (i.e., Land Use Alternative 1 and Land Use Alternative 2). Implementation

of Land Use Alternative 2, which assumes construction of a new 70,500 seat football stadium and renovation of the existing Anaheim Stadium to 45,000 seats for baseball would provide for a greater amount of wastewater to be generated than under Land Use Alternative 1. More specifically, the stadiums, office and youth sports center would not operate at the same time under the DPP. However, implementation of a new 70,500 seat football stadium would generate more wastewater than what is currently generated by the existing Anaheim Stadium due to an increased number of fixtures (sinks, toilets, etc.). Therefore, this would result in a greater demand for sewer services and facilities.

In order to accurately determine the project's projected maximum wastewater generation, the methodological assumption used assumed the difference between the amount of wastewater currently generated by the existing stadium and that proposed to be generated by a new 70,500 seat football stadium, in conjunction with all other planned new uses. In addition, it was also assumed that only one stadium would be in operation at a time. In other words the stadiums would not be operating simultaneously. Table II.1 identifies the project's sewer demand.

Most of the land uses in the DPP are standard uses such as retail, offices, etc. Stadium facilities place unique demands on utility systems. The system peaks for approximately three hours per function. Functions do not occur on a daily basis; therefore, a peaking factor is not applied to this use. For further discussions on this please see the methodology section.

Existing demand on the project site is 1,489 gallons per minute. Development of the DPP would result in the generation of an additional 1,009 gallons per minute as indicated in Table II.1, Sewer Demand Summary. According to discussions with CSDOC staff, sewer mains surrounding the project currently have capacity to accommodate the flows from the DPP. The CSDOC has adequate treatment plant capacity to serve the Project Site.

Existing structures within the Specific Plan area that will be demolished as part of project implementation will no longer generate sewage flows to local sewer lines.

Project Design Features

With development of the DPP, the existing onsite piping system will be replaced with new lines. As a siphon is an undesirable design feature, the following design will eliminate the existing sewer siphon located on the westerly portion of the property. The following improvements are included in the development of the DPP (Refer to Exhibits II-2-1 and II-2-2):

Land Use Alternate I

- Relocated onsite 8 and 12 inch lines are needed in the north-easterly section of the east ring road to accommodate flows from this area of the Sports Center site. These 8 and 12 inch lines will connect with the existing 12 inch line that eventually connects in the SARI. The projected flowrate for this pipe is 527 gallons per minute. The maximum capacity for the 12 inch line flowing full is 1,720 gallons per minute. Therefore, the remaining capacity in this on-site sewer facility is 1,193 gallons per minute.
- Separate 8, 15 and 18 inch lines are needed in the westerly side of the west ring road to accommodate flows from the westerly portion of the DPP inclusive of the new baseball stadium. These new lines will connect or run within the west ring road then travel southerly to the CSDOC Orangewood Diversion Trunk Sewer. The projected flowrate for this pipe is 2,073 gallons per minute. The maximum capacity for the 18 inch line flowing full is 5,172 gallons per minute. Therefore, the remaining capacity in this on-site sewer facility is 3,099 gallons per minute.

4292

- Additional laterals and lines will be constructed to service the various uses of the DPP.

Land Use Alternate II

- Relocated onsite 8 inch lines are needed in the north-easterly section of the east ring road to accommodate flows from this area of the Sports Center site. This 8 inch lines will connect with the existing 12 inch line that eventually connects in the SARI. The projected flowrate for this pipe is 46 gallons per minute. The maximum capacity for the 12 inch line flowing full is 1,720 gallons per minute. Therefore, the remaining capacity in this on-site sewer facility is 1,674 gallons per minute.
- Separate 8, 18 and 21 inch lines are needed in the westerly side of the west ring road to accommodate flows from the westerly portion of the DPP inclusive of the new football stadium. These new lines will connect or run within the west ring road then travel southerly to the CSDOC Orangewood Diversion Trunk Sewer. The projected flowrate for this pipe is 2,554 gallons per minute. The maximum capacity for the 21 inch line flowing full is 7,801 gallons per minute. Therefore, the remaining capacity in this on-site sewer facility is 5,247 gallons per minute.

6921

- Additional laterals and lines will be constructed to service the various uses of the DPP.

This onsite design was prepared using peak flow hydraulic analysis techniques. For the information regarding this design refer to Appendix A.

Water conservation will be an important part of DPP and it will be achieved through numerous measures intended to reduce water consumption and will, therefore, reduce wastewater flows. The water conservation measures to be implemented are outlined in Section I.

Methodology

Existing Analyses

Information was obtained from the City of Anaheim, CSDOC and the Anaheim Stadium personnel on existing facilities. The existing sewer system was evaluated by determining existing physical features and capacities of the system utilizing tables from the "ASPE Fundamentals of Plumbing Design" and standard hydraulic techniques (refer to Appendix A). This document uses a peak flow analysis based upon Mannings equation and total weighted fixture unit count.

Proposed Analyses

There are various methods available for projecting the wastewater discharge from a proposed development. For this analysis both the City of Los Angeles wastewater flow generation factors and the American Society of Plumbing Engineers (ASPE) Fundamentals of Plumbing Design Handbook were used.

Newer stadium designs for restrooms exhibit more fixture units per restroom than before which generates a higher wastewater flow. In addition, the concession stands contain more utility sinks, etc. This and other new design techniques have increased the wastewater generated from stadiums versus the older designs therefore achieving higher wastewater flows than experienced in the past.

The City of Los Angeles has developed and recently updated its wastewater flow generation rates for different land use categories. This information was presented to the CSDOC. The CSDOC approved the use of these generation rates for wastewater flow. These rates are applied to the projected square footage in each land use category to calculate estimated wastewater flows. This technique excludes the analysis of the proposed stadiums.

The proposed stadiums generate a unique flow characteristic. The stadiums generated wastewater flow cannot be classified on a daily basis yet must be classified by peak

analysis utilizing fixture unit count. A stadium exhibits a peak flow during the intermissions of the events approximately once a week during occupancy. In order to compensate for this peak flow information was obtained for similar stadiums currently in operation throughout the country and the City of Anaheim information based on the Arrowhead Pond in Anaheim. This information is provided in Appendix A. In conjunction with this information and the ASPE Handbook peak wastewater flows were projected for both the proposed Football and Baseball Stadiums.

This peak flow analysis includes the option of only one major sporting event occurring at any given time. This means that a second sporting event occurring in the other stadium, office or in the Youth Sports Center will not happen. Therefore these flows were not included in the sewer flow calculations.

Mitigation Measures

Mitigation Measure No. 1 - Prior to issuance of the first building permit for the project, the property owner/developer shall, to the satisfaction of the City Engineer, provide funding for or construct sewer lines in the westerly side of the west ring road to accommodate flows from the western side of the property that will connect to the CSDOC Orangewood Diversion Sewer.

Significant Unavoidable Adverse Impacts

The proposed improvements discussed above will be provided in order to accommodate the DPP. No significant unavoidable adverse impacts are anticipated.

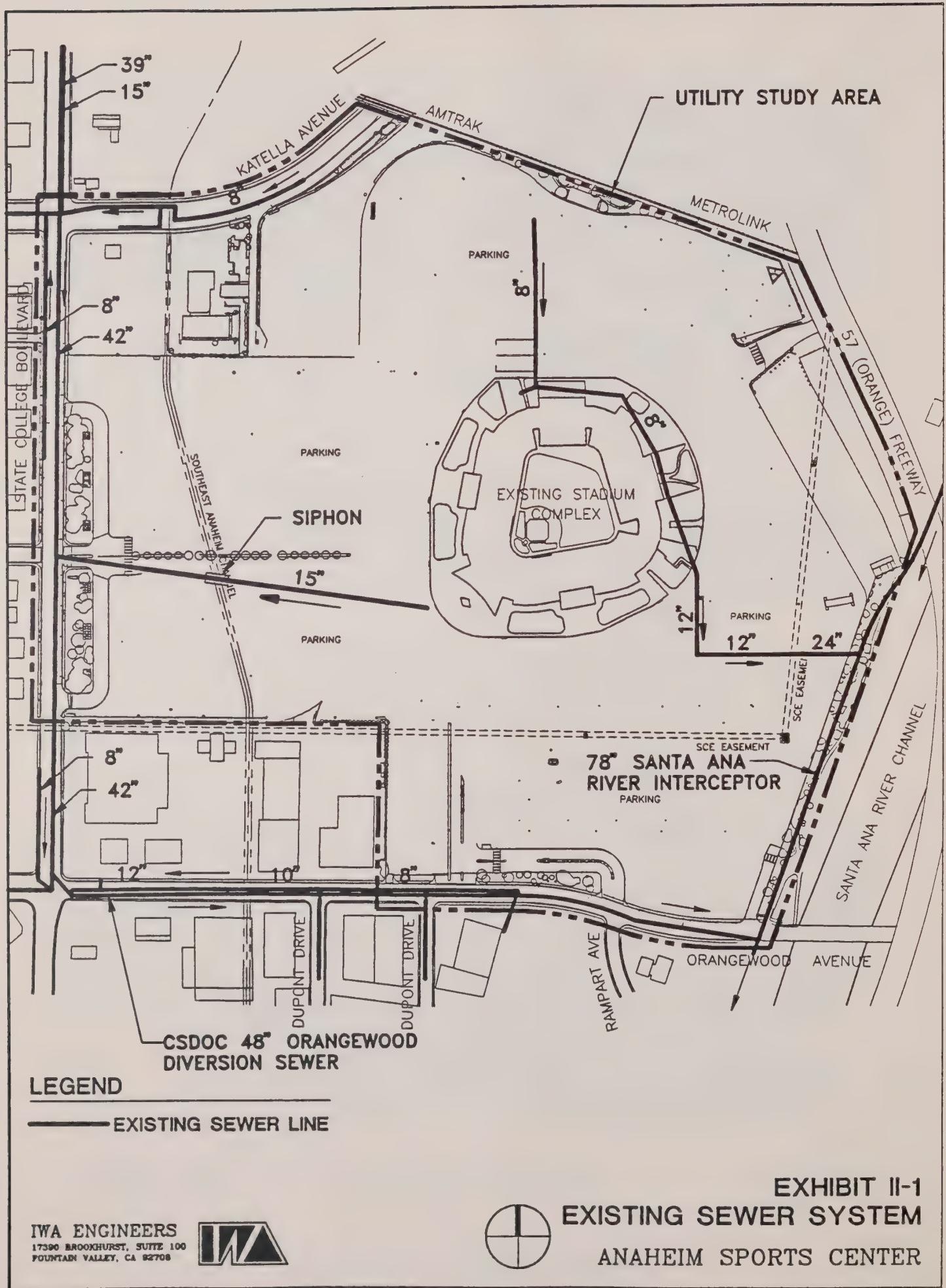
Cumulative Impacts

With the institution of the Orange County Regional Water Reclamation Project (OCR Project), CSDOC plans for water reclamation and expanding treatment plant capacity regional needs will be met for sewage disposal. The OCR project will reduce the amount of sewage that will need to be treated and the CSDOC treatment plants. Projected flows generated by the Project have been accounted for and anticipated in the CSDOC Master Plan. Capacities for the additional flows from the DPP will be secured via connection charges or agreements and will not be affected by other development or cumulative impacts from other developments.

TABLE II.1

SEWER DEMAND SUMMARY

Component	Sewer Demand (gallons per minute)
Existing Uses	
1. Anaheim Stadium	1,478
2. Commercial/Office (At the Southeast corner of St. College and Katella)	3
3. Exhibition Center	8
Total Existing Demand	1,489
Proposed Uses	
1. Renovated Football Stadium(2)	925
2. Baseball Stadium(3)	0
3. Urban Entertainment/Retail	41
4. Office (3)	0
5. Hotel #1 (385,000 sf)	32
6. Hotel #2 (165,000 sf)	14
7. Youth Sports Center (3)	0
Existing Uses to be Removed	
1. Commercial/Office (At the Southeast corner of St. College and Katella)	-3
Total Project Net Demand	1,009
NOTES:	
(1) See Appendix A for calculations.	
(2) This is the increase in wastewater generation over the existing Anaheim Stadium listed under Existing Uses. The total proposed sewer demand for the renovated football stadium is 2,403 GPD.	
(3) This use is not included in the projected demand since these uses will not operate concurrently.	



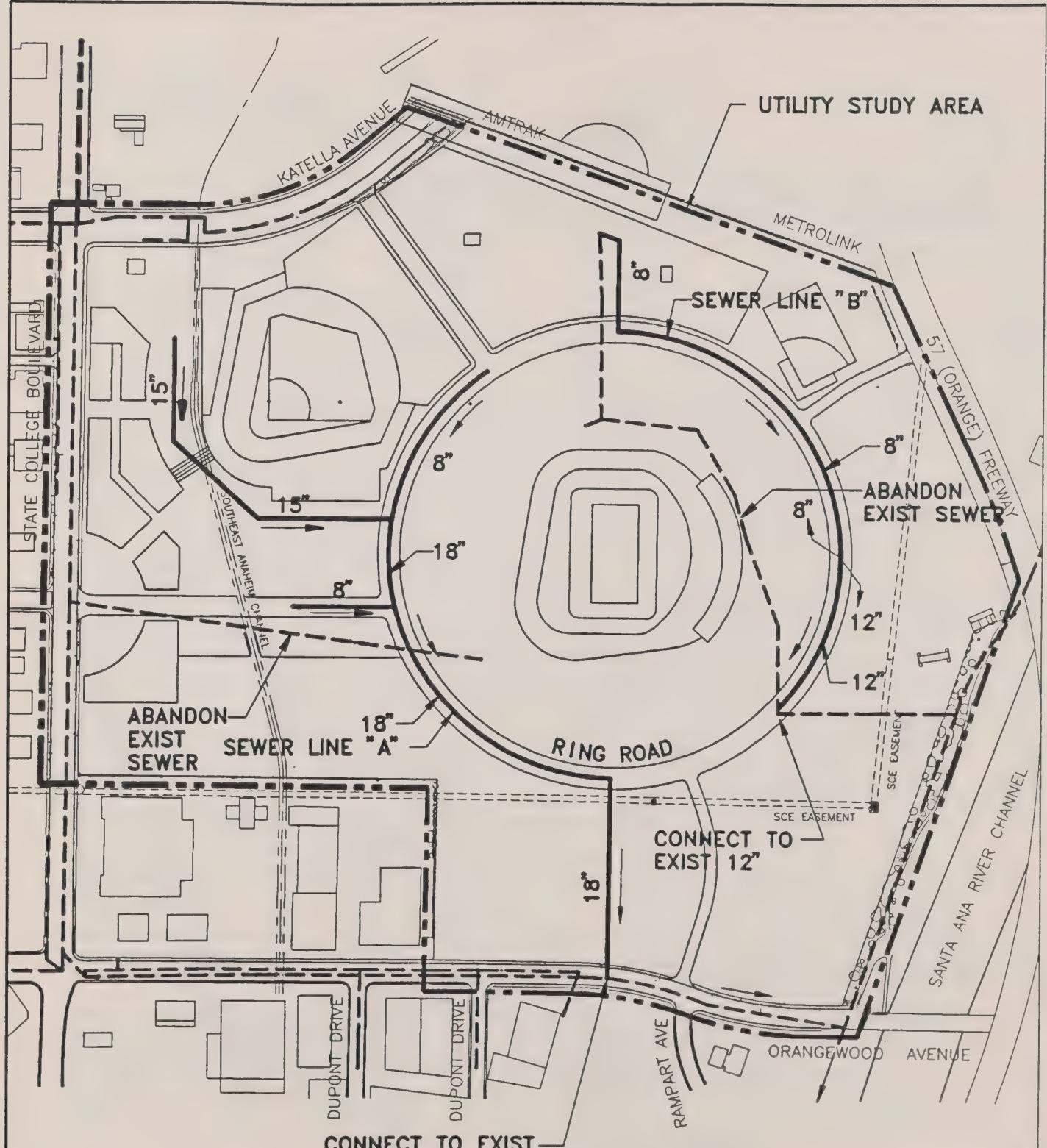


EXHIBIT II-2-1
LAND USE ALTERNATE 1
PROPOSED SEWER SYSTEM
ANAHEIM SPORTS CENTER

IWA ENGINEERS
 17390 BROOKHURST, SUITE 100
 FOUNTAIN VALLEY, CA 92708



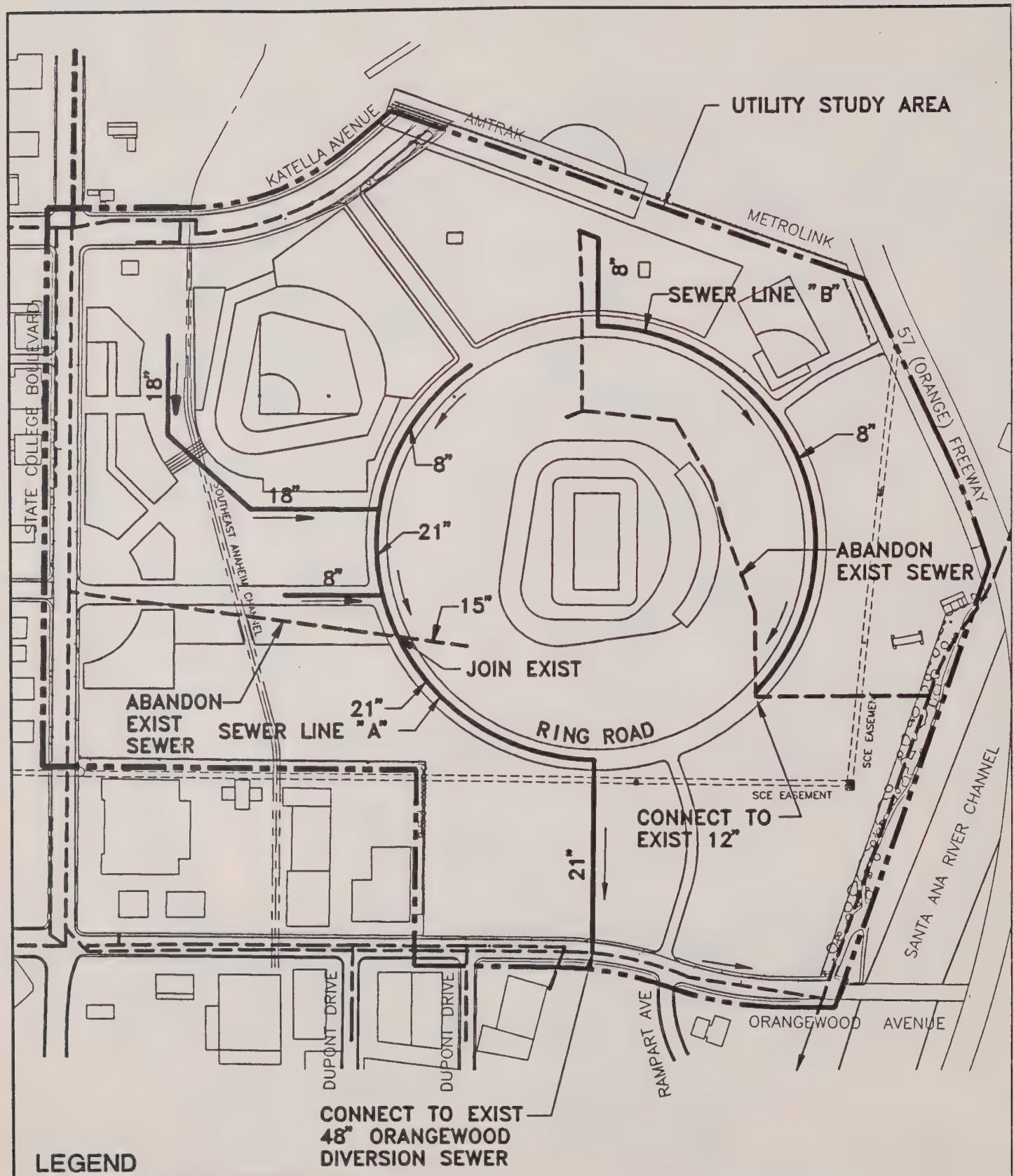


EXHIBIT II-2-2
LAND USE ALTERNATE 2
PROPOSED SEWER SYSTEM
ANAHEIM SPORTS CENTER

IWA ENGINEERS
17390 BROOKHURST, SUITE 100
FOUNTAIN VALLEY, CA 92708



III. DRAINAGE/STORM DRAINS

This section addresses the storm drain system serving the Development Program Plans (DPP) outlined in Exhibits A-1 and A-2. The different land uses alternatives do not effect the drainage patterns.

Environmental Conditions

Regional Setting

The project vicinity is served by the Southeast Anaheim Channel Facility E12 (herein referred to as SACF E12). This county storm drain channel starts at the Santa Ana River in Orange, California and proceeds in a northwesterly direction from the river approximately 1,760 feet, then northerly for about 200 feet to the southern City Limits of Anaheim, then northerly 915 feet to the center-line of Orangewood Avenue, then northerly 2,800 feet across the Anaheim Stadium Center property to a point on the north side of Katella Avenue angling in a northeasterly direction to a point across the AT&SF Railroad tracks, then northerly to Cerritos Avenue, then westerly along Cerritos Avenue to State College Boulevard, then northerly in State College Boulevard to Lincoln Avenue. Storm water is collected by the City storm drain system and carried to an OCFCD facility that enters the Santa Ana River which enters into the Pacific Ocean at the City of Newport Beach. The County SACF E12 begins near the intersection of State College Boulevard and Lincoln Avenue in the City of Anaheim. This facility varies in size from a 42-inch pipe at the beginning to a 11' by 10' concrete box where it enters the Santa Ana River Channel.

The Federal Emergency Management Agency (FEMA) has indicated on the Flood Insurance Rate Maps (FIRM) that the project site is within two Flood Zones. The northeasterly portion of the project site is in Flood Zone X and is subject to flooding during a 500-year storm or a 100-year storm with a flood depth less than 1 foot. The remaining area of the project site is in Flood Zone A0 which is classified as a special flood hazard area and subject to flooding during a 100-year storm with an average flood depth of 1 foot.

Orange County is in the process of improving the lower Santa Ana River from I-405 to its outfall at the Pacific Ocean. Also proposed as part of the Santa Ana River Project is construction of the Seven Oaks Dam in Redlands and raising the Prado Dam by 28.4 feet. These three improvement projects are included in OCFCD's 5-Year Capital Improvement Plan.

Local Setting

The Project Site is located within the 100-year flood zone as indicated on the 1989 FIRM

(Flood Insurance Rate Map). This indicates that the site will be inundated with an average of 1 foot of water during a 100 year storm event. The completion of the Santa Ana River Project will allow the Santa Ana River to completely contain a 100-year storm event within its channel boundaries. The full effects of this improvement will not be evident until the construction of the Seven Oaks Dam, improvement to the Prado Dam, and downstream improvements are completed. The projected completion date for The Santa Ana River Project is 1998. Due to the current County of Orange financial situation the improvements to the Prado Dam have been delayed. At the completion of all components of the Santa Ana River Project the Project Site will be outside of the 100-year flood plain. The SACF E12 is contained within an OCFCD 25' drainage easement (see Exhibit III-1).

The drainage from the Project Site flows into the SACF E12. This facility was designed in the early 1960's under old design criteria. Due to the more stringent design standards today this drainage facility is considered deficient according to City standards. The City's standard storm drainage criteria are shown in Table III-1.

**TABLE III-1
DRAINAGE DESIGN CRITERIA CHART**

The use of underground storm drain systems shall be required when any one of the following conditions exist:

- a. Flows will exceed street right-of-way.
- b. Future upstream development will cause drainage problems.
- c. The flood width on arterial highways exceeds the parking lane plus one-half a travel lane or 17 feet from curb face, whichever is lesser, during a 10-year storm.
- d. The need for cross gutters on arterial highways.
- e. Excess nuisance water in residential areas (surface flow maximum is 1,000 feet).
- f. Median drainage is required.
- g. Flooding of building in a 100-year storm.
- h. Product of depth x velocity is greater than six.
- i. Flooding or street overflow will cause damage.

Design Storm Frequency for Drainage Systems*

100-Year	Arterial highways in hillside areas, storm drains connecting to the Santa Ana River
----------	---

Public Services and Utilities Technical Report

25-Year	Arterial highways in flatland areas, local streets in hillside areas, storm drains in sump conditions
10-Year	Local streets in flatland areas, onsite private drainage systems
Source: City of Anaheim Public Works Department 1992.	

The SACF E12 is located within a 25' easement dedicated to the City of Anaheim and the OCFCD (see Exhibit III-1). This easement allows for the construction of minor parking lot improvements such as curb, landscaping, etc. within the easement. This facility extends southerly through the westerly portion of the property. The channel within the Project Site is an 11' wide by 9' deep concrete box culvert.

The Project Site slopes to the south. Catch basins and gutters collect and direct the runoff to the SACF E12 which runs through the site and then to the Santa Ana River.

These storm drain lines and most of the existing lines in the study area were designed and constructed over 25 years ago based on outdated OCFCD criteria. The OCFCD has revised their storm drain design requirements. Evaluation of these existing storm drain lines under the new OCFCD criteria may indicate that most lines are currently inadequate and can only handle a two-year frequency storm event.

Environmental Impacts

Runoff from the Project Site will be collected by onsite trench drains, area drains, and catch basins and directed via a subsurface drainage system to the SACF E12 storm drain system.

With the development of the DPP the storm water runoff from the site will decrease. This proposed stormwater runoff would flow to the SACF E12. This decrease is as follows:

	Q_{10}	Q_{25}	Q_{100}
Existing Conditions	337.85	408.22	524.89
Proposed Conditions	320.68	386.59	497.42

Q_{10} , Q_{25} and Q_{100} represent 10, 25 and 100 year drainage runoff from the site respectively. Please see Hydrology Map and calculations in appendices for detailed information.

The decrease in stormwater runoff is due to the decrease of impervious ground cover

resulting from the addition of landscaped areas which are pervious. This is a positive impact to the surrounding drainage systems by reducing the flows entering the SACF E12.

The development of the DPP would require grading during construction. Grading could temporarily increase stormwater runoff erosion due to the associated removal of parking lot and the exposure of underlying soils.

The construction of the proposed stadium, retail, and entertainment space is located next to the SACF E12. From discussions with the OCFCD construction of this type must occur outside of the easement. The proposed land uses will not be constructed on top of the SACF E12. This type of construction must also be done in close coordination with the OCFCD to avoid adverse impact to the SACF E12.

Thus, with the decrease in runoff the SACF E12 is adequate to convey the stormwater runoff from the DPP.

Water Quality

As discussed above, the increase in pervious areas on the Project Site will result in an increase in percolation of water into the underlying groundwater table. Due to the nature of the increased percolation it is not anticipated that any adverse impacts will result.

Project Design Features

As shown on Exhibit III-2, the development of the DPP includes the following project design features:

- As part of the construction of the DPP an extension of the existing onsite drainage system of valley gutters, catch basins and laterals will be constructed to convey stormwater runoff.
- A new drainage system will be constructed to drain the northerly portion of the property. This system will be constructed in the Ring Road and will consist of pipe sizes ranging from 36 to 54 inches. This new drainage facility will join with the existing SACF E12.
- A new drainage system of pipes will be constructed to drain the central portion of the property. This system will be constructed in the Ring Road and will consist of pipe sizes ranging from 24 to 42 inches. This new drainage facility will join with the existing SACF E12.

- The applicant shall apply for a National Pollution Discharge Elimination System construction permit. This permit would require the preparation of a Storm Water Pollution Prevention Plan to mitigate the erosion that may occur during construction periods from storm water runoff.

Methodology

Rational and unit hydrologic methods, conforming to the 1986 OCEMA Hydrology Manual, were used for the investigation. These methods and the data and criteria they incorporate are consistent with generally accepted methods of analyzing storm water runoff in Orange County.

Hydrologic computations were made using computer analysis techniques incorporated in the programs developed by Advanced Engineering Software. This program is called the Rational Method Hydrology Computer Program (RATSC).

The RATSC program was used to size the storm drain lines. This program sizes the storm drain pipe to accommodate the calculated flows. All of the pipes on the site were sized using this method.

According to Chart III-1, the 10-year, 25-year and 100-year design storm frequencies were used in the RATSC to compute the design stormwater flows.

It is anticipated that more detailed final hydrologic studies will be conducted in conjunction with the final design of the storm drain facilities.

Mitigation Measures

Since the development of the DPP is anticipated to decrease the burden on the existing public drainage system, there are no mitigation measures proposed at this time.

Significant Unavoidable Adverse Impacts

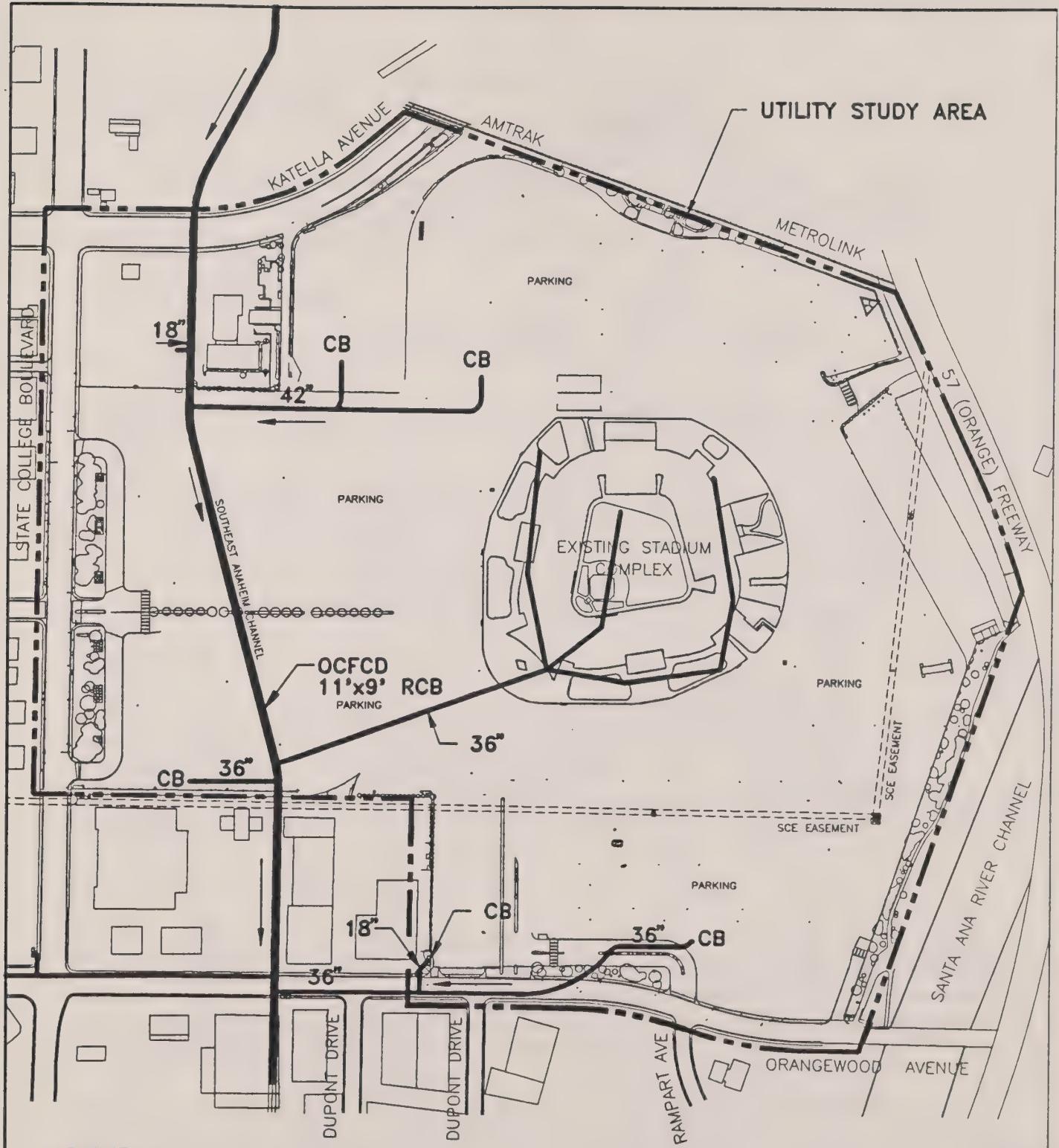
The proposed drainage system improvements discussed above will be provided in order to accommodate the DPP. No significant unavoidable impacts are anticipated.

Cumulative Impacts

Completing all three improvement projects included in OCFCD's 5-Year Capital Improvement Plan will move the Project Site and surrounding area out of the 100 year flood plain. It has also been proven that the development of the DPP will decrease the

Public Services and Utilities Technical Report

burden on the existing storm drain system having a positive impact. Therefore additional storm drain flows from the DPP will not be affected by other development or cumulative impacts from other developments.



LEGEND

- EXISTING STORM DRAIN LINE
- CB** - CATCH BASIN
- RCB** - REINFORCED CONCRETE BOX

EXHIBIT III-1
EXISTING DRAINAGE SYSTEM
ANAHEIM SPORTS CENTER

IWA ENGINEERS
17300 BROOKHURST, SUITE 100
FOUNTAIN VALLEY, CA 92708



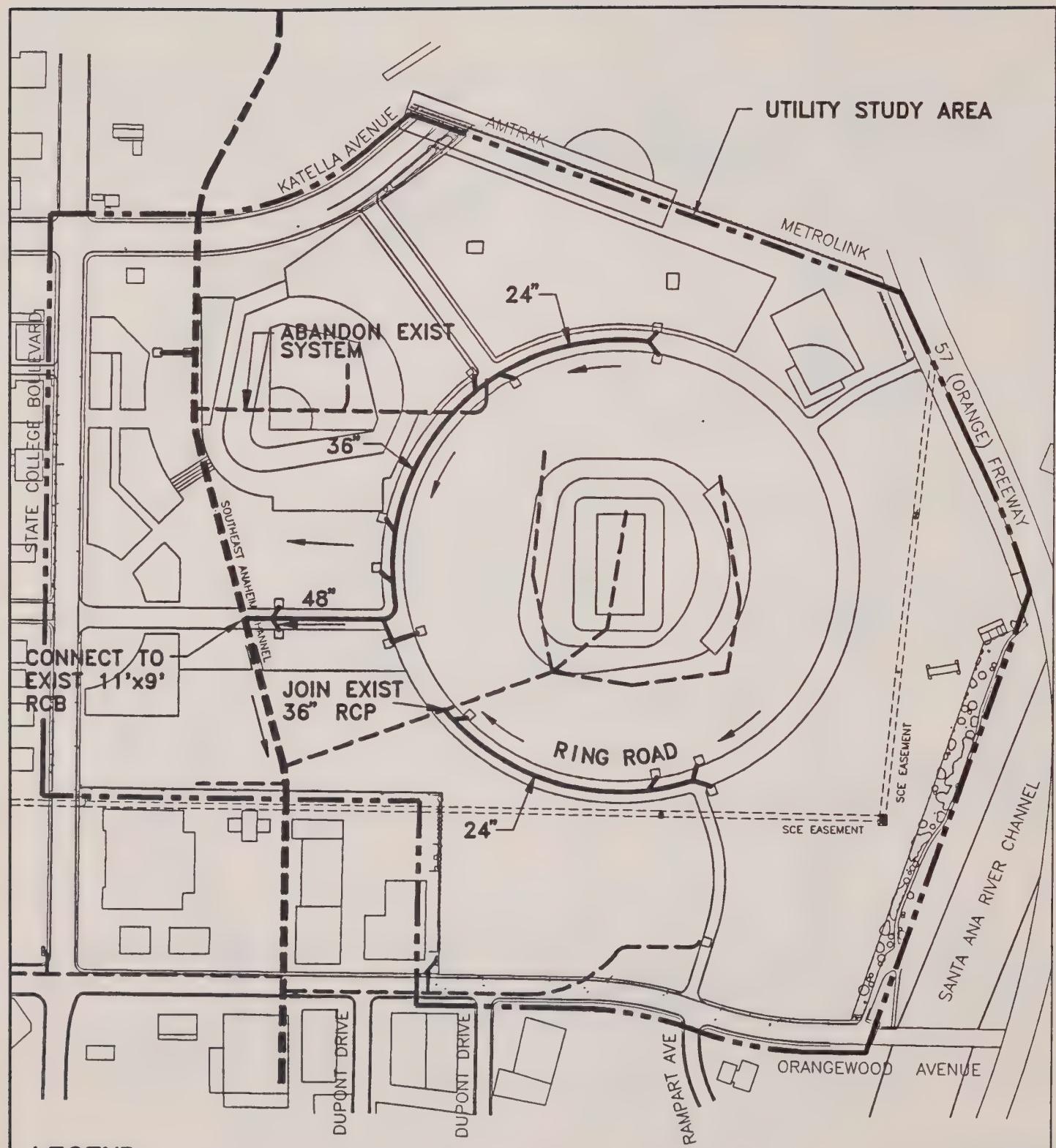


EXHIBIT III-2
PROPOSED DRAINAGE SYSTEM
ANAHEIM SPORTS CENTER

IWA ENGINEERS
 17300 BROOKHURST, SUITE 100
 FOUNTAIN VALLEY, CA 92708



IV. ELECTRICAL

This section addresses the electrical system serving the Development Program Plans (DPP) outlined in Exhibits A-1 and A-2. For the purpose of this analysis these DPP alternatives have the same effect on the electrical system.

Environmental Conditions

Regional Setting

The City of Anaheim Public Utilities Department provides electrical services to the Project Site area. The Public Utilities Board advises the City Council on Public Utility matters.

Primary power supply comes from the San Onofre Nuclear Power Plant and from the Intermountain Power Plant in Utah via the Southern California Edison (SCE) network. The Doweling Substation supplies an additional 50 megawatts for peaking requirements. Anaheim's main feeder substation is located on Lewis Street, east of I-5. The existing facilities currently provide adequate service to the project area.

Local Setting

The project site is served by the 250 million volt amperes (MVA) Lewis Substation located on the corner of Cerritos Avenue and Lewis Street, south of Cerritos Avenue, and the 65 MVA Katella Substation at the intersection of I-5 and Anaheim Boulevard. It is planned that the Katella Substation will be relocated and upgraded to a new 100 MVA Katella Substation as part of the 5-Year Capital Improvement Plan, and will be constructed at the corner of Katella Avenue and Claudina Way. The Katella Substation relocation is scheduled for completion in February 1996.

The Project Site is currently serviced from the Linda, Marcy and Mueller 12 kV circuits. These circuits that are adjacent to the Project Site are overhead along State College Boulevard, Katella Avenue, and Orangethorpe Avenue, except for the portions in the existing stadium parking lot. Some poles along these streets may need to be relocated to accommodate new entrances, exits, etc. (See Exhibit IV-1).

As part of the City of Anaheim's 5-Year Underground Conversion Program, the City of Anaheim has approved undergrounding all of the existing and future utilities (69kV and 12kV transmission and distribution systems, communication systems, telephone, CAT and associated facilities) on the major roadways in the Commercial Recreation Area. This includes the future undergrounding of overhead and underground facilities for State College Boulevard from approximately 700 feet north of Orange wood Avenue to La Palma

Avenue. This overhead is scheduled for undergrounding in the year 2001.

A future fiber optic cable is tentatively planned to be located along Katella Avenue between Douglas Road and Lewis Street. This is scheduled for completion during early 1996.

The existing Anaheim Stadium has exhibited a peak demand for the last 14 months of 4,545 kW.

Electric and Magnetic Fields

Research conducted over the past decade has raised much debate over the health effects associated with electric and magnetic fields, typically referred to as electromagnetic fields (EMF). Electric fields are produced in electrical lines as a result of voltage applied to wiring, and is measured in volts per meter (V/m) or kilovolts per meter (Kv/m). Electric field strength falls off dramatically with distance, and many objects, including trees and houses shield these fields. Most exposure to residential electric fields is a result of internal household appliance use. Magnetic fields are a result of the movement (current) of electricity. These fields are measured in Gauss, however, this measure is extremely large, and fields from electrical lines are generally referred to in milligauss (mg). As with electric fields, magnetic field strength decreases dramatically with distance from the source, however magnetic fields are not shielded by objects such as trees and buildings (Bailey Research Associates 1992).

Exposure to electromagnetic fields is an existing circumstance that is typical in urban communities, including Anaheim, and the intensity of EMF varies with the type of electricity source. Whether the fields are originating from household appliances or high voltage transmission lines, public and scientific concern exists regarding the health effects resulting from exposure. The relationship between EMF exposure and health effects has not been scientifically proven; results from the plethora of epidemiological and laboratory studies that have taken place are inconclusive. Scientists for SCE, as well as most scientists to date, have found no threshold value, no dose-response, or no causative relationship that demonstrates evidence of any physical effects from EMF.

Environmental Impacts

The City of Anaheim Electrical Engineering Department designs their own electrical systems. Exhibits IV-2 and IV-3 shows a preliminary design by the City's Electrical Department. Table IV.1 shows the projected peak demands for the DPP.

Project Design Features

Public Services and Utilities Technical Report

With development of the DPP, the existing onsite electrical system will be replaced with new lines. The following improvements are included in the development of the DPP (Refer to Exhibit IV-2):

- A new onsite conduit system will be constructed in the ring road to distribute power to the various locations throughout the site.
- New lines and appurtenances will be installed per Exhibits IV-2 and IV-3 to supply the DPP area.

These project design features may change with the final analysis by the City's electrical department.

Mitigation Measures

The project design features associated with the construction of the DPP are anticipated to meet any power needs therefore no mitigation measures are proposed at this time. This conclusion may change with the final analysis by the City's electrical department.

Significant Unavoidable Adverse Impacts

The proposed electrical system improvements proposed by the City will be provided in order to accommodate the DPP. No significant unavoidable impacts are anticipated.

Cumulative Impacts

The additional electrical demand from the DPP will not be affect or be affected by other development or cumulative impacts from other developments.

V. Roadway and Freeway Feasibility Improvements

The Anaheim Sports Complex Traffic Analysis Report was prepared by Austin-Foust Associates.

Long Range Impacts

According to the findings in the above report, the project causes a 0.02 increase in the PM peak hour ICU at State College Boulevard and Chapman Avenue, which operates at 1.08 under 2010 Base Case conditions. However, the Orange County Congestion Management Program (CMP) specified that a project has no significant impacts if the project causes less than a 0.10 increase in the ICU value at an intersection which reaches LOS "F" under base case conditions.

From these findings no improvements are necessary to mitigate the Development Program Plan (DPP).

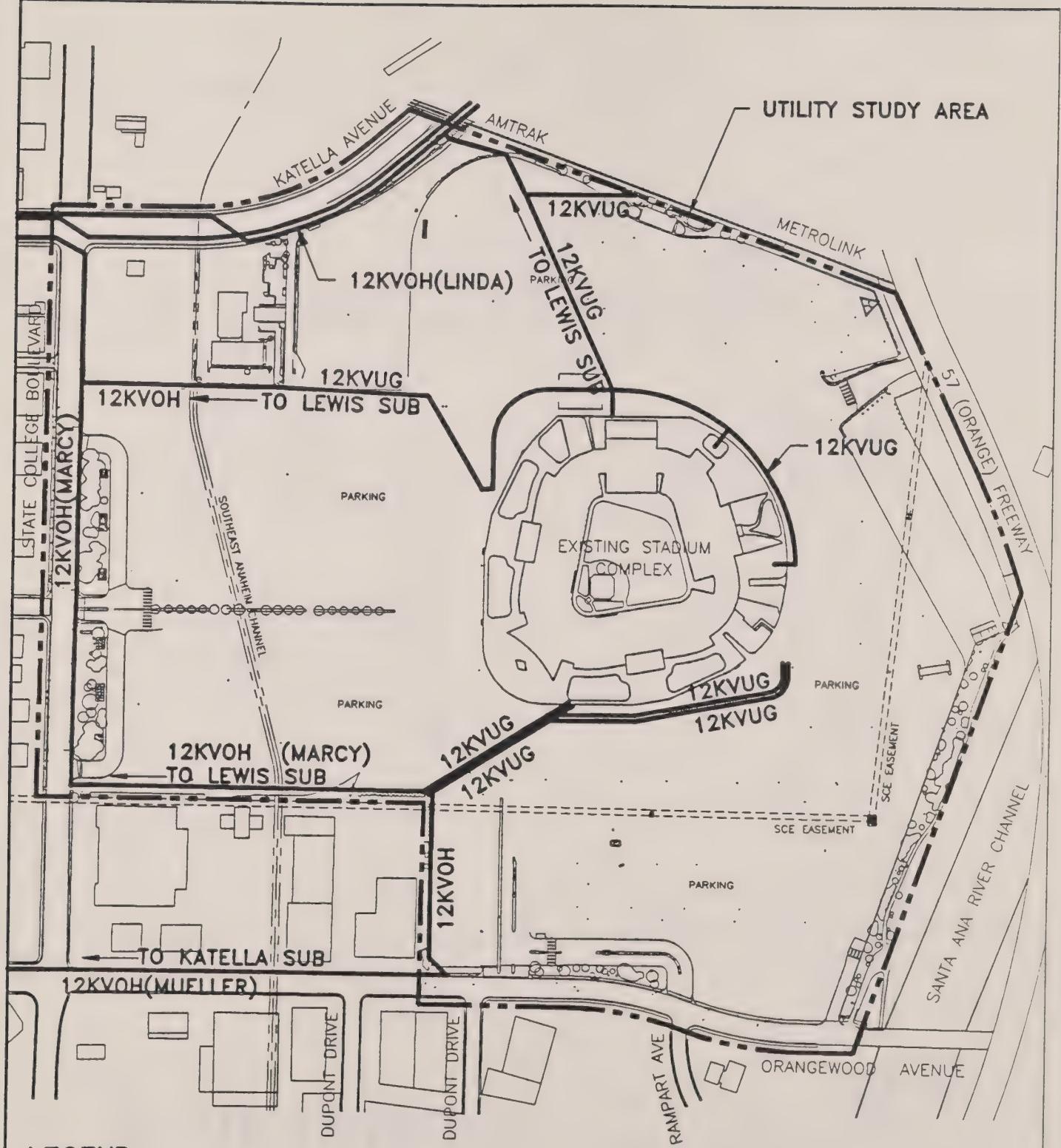
Short Range Impacts

As the Traffic Analysis Report indicates three intersections will operate at LOS "E" or worse under 2000 Base Case and with-project conditions. Therefore the project has no significant impact on any of the study intersections.

From these findings no improvements are necessary to mitigate the Development Program Plan (DPP).

TABLE IV.1
PROJECTED PEAK ELECTRICAL DEMAND

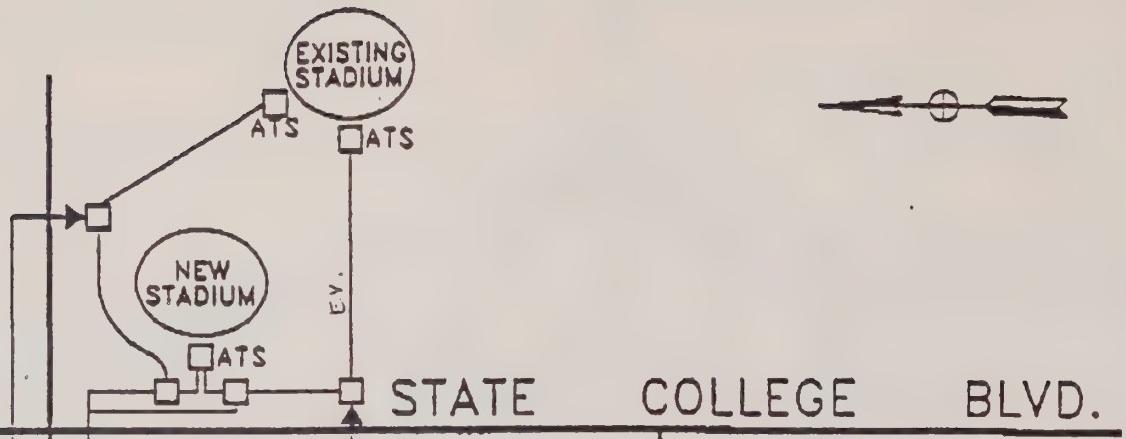
Component	Unit	Factor	Consumption Rate (watts)(2)	Electrical Demand (KW/Day)
Existing Land Use				
1. Anaheim Stadium(3)	70,500 seats			4,545
2. Commercial/Office (At the Southeast corner of St. College and Katella)	55,140 sf	5.2		287
3. Exhibition Center	150,000 sf	5.2		780
4. Parking	16,000 spaces	0.05		1
Existing Demand				5,612
Proposed Land Use				
1. New Stadium (2)	40,500 seats	0		0
2. Urban Entertainment/Retail	750,000 sf	6.7		5,025
3. Office	900,000 sf	5.2		4,680
4. Hotel #1	385,000 sf	4		1,540
5. Hotel #2	165,000 sf	4		660
6. Youth Sports Center (2)(3)	750 seats	1		1
7. Parking (Onsite) (3)	14,000 spaces	0.05		1
Existing Uses to be Removed				
1. Commercial/Office (At the Southeast corner of St. College and Katella)	55,140 sf	-5.2		-287
Total Project Net Demand				11,620
NOTES				
(1) Consumption rates are based per 1,000 square feet where applies.				
(2) This use is not included in the projected demand since these uses will not operate concurrently.				
(3) These land use demands are based upon available information. The City could not provide consumption rates for these items.				



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FOUNTAIN VALLEY, CA 92708



EXHIBIT IV-1
EXISTING ELECTRICAL SYSTEM
ANAHEIM SPORTS CENTER



KATELLA AVE.

LEWIS ST.

GENE AUTRY WAY

LEWIS
SUB

KATELLA
SUB

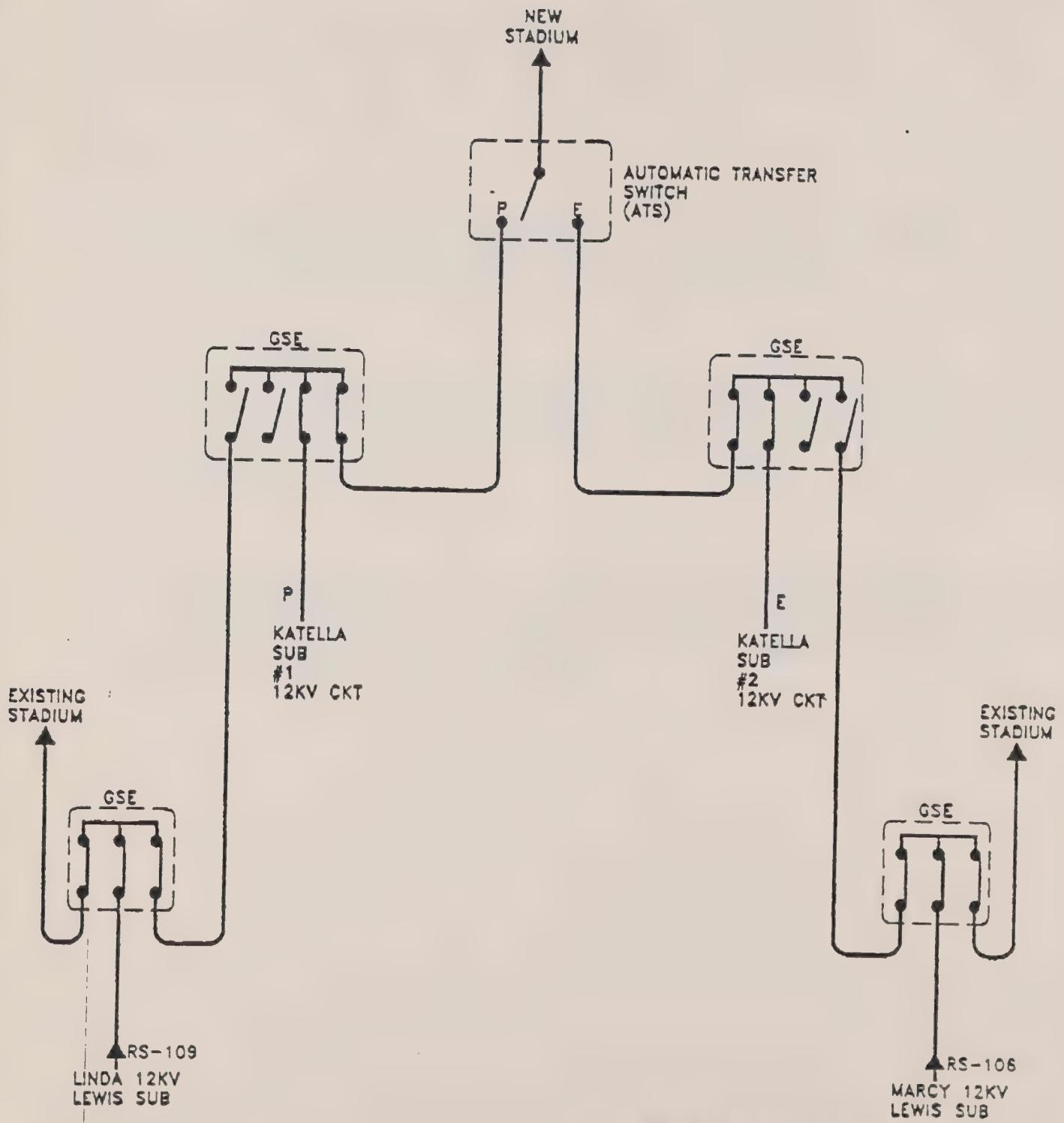
1-5

FREEWAY

EXHIBIT IV-2

PRELIMINARY

DATE	REVISION	REV.	DESIGNER	SR. ENGR.	P.E.	ENGR. MGR.
CITY OF ANAHEIM	PROPOSED ELECTRICAL SERVICE TO BASEBALL STADIUM	DRAWN BY: R.S.V. DATE: 12-09-94 CHK. SUPERV. DESIGNER: ENGR. MGR. D.L.	W.O.	DRAWING NO.	SCALE: NONE REV.	



PRELIMINARY EXHIBIT IV-3

O. DATE	REVISION	REV.	DESIGNER	S.R. ENGR.	P.E.	ENGR. MGR.
CITY OF ANAHEIM	PROPOSED ELECTRICAL SERVICE TO BASEBALL STADIUM	DRAWN BY: R.S.V. CHR.	DATE 12-09-94 SUPV.	W.O.	SCALE: NONE	
		DESIGNER: D.L.	ENGR. MGR.	DRAWING NO.	REV.	

VI Project Alternatives

Description

Three project alternatives are presented along with the DPP. These three alternatives are the No Project Alternative, Design Alternative 1, and Design Alternative 2. These three alternatives are represented in Tables VI.2, VI.3, and VI.4 respectively.

Methodology

The Development Program Plan (DPP) was determined to be the base case to which the proposed projects were to be measured (Refer to Table VI.1). The project alternatives were evaluated using projected water demands as a comparison on the impact to local utilities in the area.

Analysis

From this methodology and in reference to Table VI.1 all of the project alternatives have a relatively equivalent impact on the surrounding utility systems. From this it is determined the proposed utility systems for all project alternatives will be designed in the same order of magnitude in accordance with the DPP design.

TABLE VI.1
PROJECTED AVERAGE DAILY WATER DEMAND
PROJECT ALTERNATIVE SUMMARY TABLE

ALTERNATIVE	Water Demand (million gallons per day)	Percent of DPP
Development Program Plan (DPP)	0.809	100%
No Project Alternative	0.645	80%
Design Alternative 1	0.758	94%
Design Alternative 2	0.693	86%

TABLE VI.2
PROJECTED AVERAGE DAILY WATER DEMAND
NO PROJECT ALTERNATIVE

Component	Consumption Rate (gallons per day)(2)	Water Demand (million gallons per day)
Proposed Uses		
1. Anaheim Stadium (Existing)	70,500 seats	4 0.282
3. Urban Entertainment/Retail	1,218,480 sf	80 0.097
4. Office	900,000 sf	150 0.135
5. Landscape/Irrigation	16.8 acres	7,760 <u>0.130</u>
	Total Proposed Demand	0.645
NOTES		
(1) This land use is removed as part of the DPP		
(2) Consumption rates are based per 1,000 square feet where applies.		

TABLE VI.3
PROJECTED AVERAGE DAILY WATER DEMAND
DESIGN ALTERNATIVE 1

Component	Consumption Rate (gallons per day)(1)	Water Demand (million gallons per day)
Proposed Land Use		
1. Anaheim Stadium (Existing)	70,500 seats	4
2. Baseball Stadium	4,000 seats	4
3. Urban Entertainment/Retail	300,000 sf	80
4. Office	900,000 sf	240
6. Hotel #1 (385,000 sf)	350 rooms	180
7. Hotel #2 (165,000 sf)	150 rooms	180
8. Landscape/Irrigation	16.8 acres	7,760
Total Proposed Demand		0.758
NOTES		
(1) Consumption rates are based per 1,000 square feet where applies.		

TABLE VI.4
PROJECTED AVERAGE DAILY WATER DEMAND
DESIGN ALTERNATIVE 2

Component	Consumption Rate (gallons per day)(1)	Water Demand (million gallons per day)
Proposed Land Use		
1. Anaheim Stadium (Existing)	70,500 seats	4 0.282
2. Baseball Stadium(2)	4,000 seats	4 0.016
3. Urban Entertainment/Retail	750,000 sf	80 0.060
4. Office	450,000 sf	150 0.068
5. Exhibition Center	150,000 sf	80 0.012
6. Hotel #1 (385,000 sf)	350 rooms	130 0.046
7. Hotel #2 (165,000 sf)	150 rooms	130 0.020
8. Youth Sports Center	750 seats	4 0.003
9. Landscape/Irrigation	16.8 acres	7,760 0.130
10. Condominiums/Apartments	360 units	160 <u>0.058</u>
Total Proposed Demand		0.693
NOTES		
(1) Consumption rates are based per 1,000 square feet where applies.		

**PUBLIC SERVICES AND UTILITIES
TECHNICAL REPORT APPENDICES**

**The Following Appendices are Available for Review at the
City of Anaheim Planning Department**

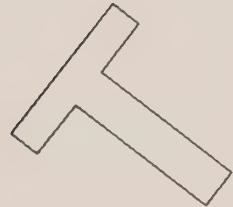
- Sewer Calculations
- Drainage Calculations

APPENDIX C
TRAFFIC STUDY

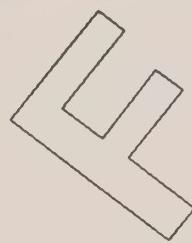
ANAHEIM SPORTS COMPLEX

TRAFFIC ANALYSIS

JANUARY 1996



ANAHEIM SPORTS COMPLEX
Traffic Analysis

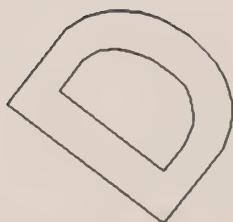


Prepared for:

Michael Brandman Associates

Prepared by:

Austin-Foust Associates, Inc.
2820 North Tustin Avenue
Santa Ana, California 92705
(714) 667-0496



January 11, 1996

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I

INTRODUCTION

This report presents the results of a traffic analysis performed for the proposed Anaheim Sports Complex located in the Anaheim Stadium parking lot in the City of Anaheim. This report has been prepared for inclusion in the Environmental Impact Report being prepared for the site.

PROJECT DESCRIPTION

The proposed project is located in the Anaheim Stadium parking lot bounded by Katella Avenue to the north, the SR-57 Freeway to the east, Orangewood Avenue to the south and State College Boulevard to the west. Figure I-1 illustrates the location of the proposed project. The existing Anaheim Stadium will remain. New uses associated with the proposed project will consist of a new 45,000 seat baseball stadium or a new 70,500 seat football stadium and renovated 45,000 seat Anaheim Stadium to be used for baseball, 750,000 square feet of Urban Entertainment Retail uses, 900,000 square feet of office space, two hotels with a total of 500 rooms, a 750 seat Youth Sports Center Stadium, and 14,000 on-site parking spaces. The project also proposes 100,000 square feet of permanent exhibition space to replace temporary structures currently being utilized at the stadium site. This, in conjunction with 50,000 square feet of existing permanent space would provide a total of 150,000 square feet of exhibition space on-site. An additional 7,000 parking spaces will be available off-site. The proposed site plan is illustrated in Figure I-2.

ANALYSIS SCOPE

The analysis examines short-range (year 2000) and buildup (year 2010) impacts. The Anaheim Traffic Analysis Model (ATAM) was utilized to forecast year 2000 and year 2010 conditions. The traffic model was prepared to support the traffic analysis portion of the City's General Plan. A complete description of the traffic model can be found in the reference at the end of this chapter.

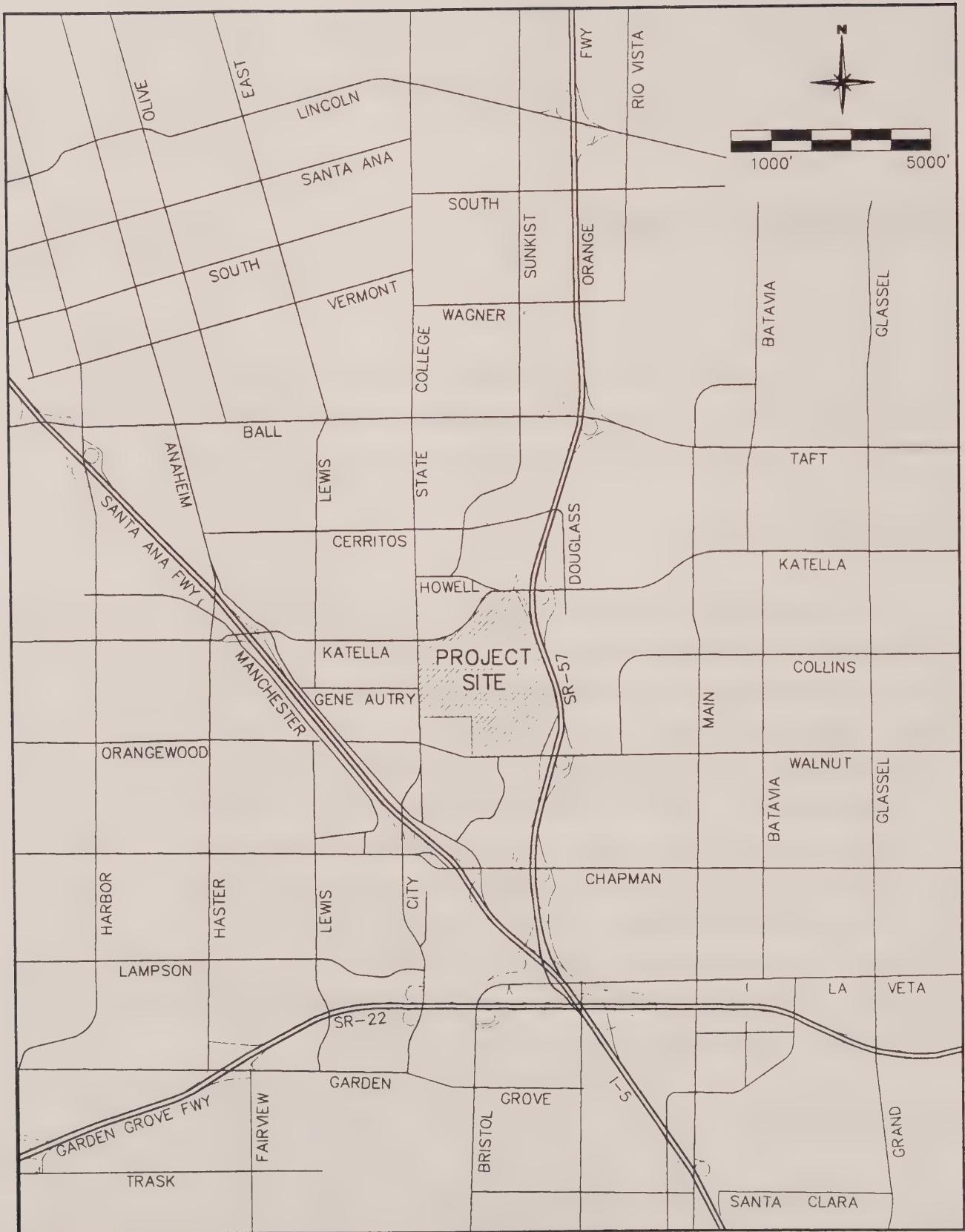


Figure I-1
PROJECT LOCATION

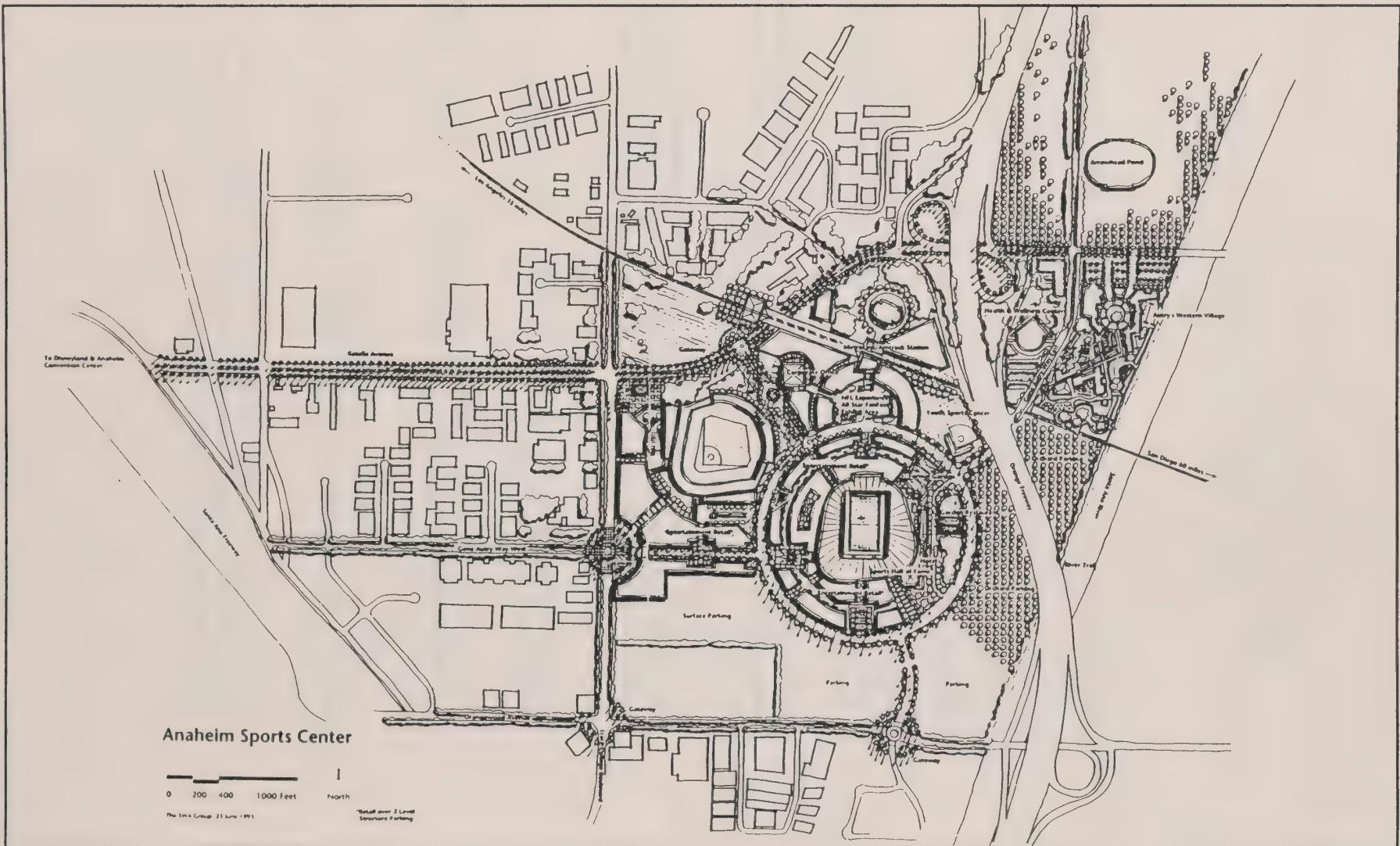


Figure I-2
PROPOSED SITE PLAN

The traffic analysis material presented here is set out as follows:

- Chapter II - Project Setting
- Chapter III - Project Impact Analysis

DEFINITIONS

Certain terms used throughout this report are defined below to clarify their intended meaning:

ADT	Average Daily Traffic. Generally used to measure the total two-directional traffic volumes passing a given point on a roadway.
DU	Dwelling Unit. Used in quantifying residential land use.
ICU	Intersection Capacity Utilization. A measure of the volume to capacity ratio for an intersection. Typically used to determine the peak hour level of service for a given set of intersection volumes.
LOS	Level of Service. A scale used to evaluate circulation system performance based on intersection ICU values or volume/capacity ratios of arterial segments.
Peak Hour	This refers to the hour during the AM peak period (typically 7 AM - 9 AM) or the PM peak period (typically 3 PM - 6 PM) in which the greatest number of vehicle trips are generated by a given land use or are travelling on a given roadway.
TSF	Thousand Square Feet. Used in quantifying non-residential land uses, and refers to building floor area.
V/C	Volume to Capacity Ratio. This is typically used to describe the percentage of capacity utilized by existing or projected traffic on a segment of an arterial or intersection.
VPD	Vehicles Per Day. Similar to ADT, but more typically applied to trip generation (i.e., the amount of traffic generated by a given amount of land use).
VPH	Vehicles Per Hour. Used for roadway volumes (counts or forecasts) and trip generation estimates. Measures the number of vehicles in a one hour period, typically the AM or PM peak hour.

REFERENCES

1. "Anaheim General Plan Traffic Analysis, Traffic Model Description," Austin-Foust Associates, Inc., August 1992.

II

PROJECT SETTING

This chapter describes the project site in relation to the transportation setting. The existing circulation system is discussed.

SURROUNDING HIGHWAY NETWORK

The project site is bounded by two major arterials (Katella Avenue, State College Boulevard), a primary arterial (Orangewood Avenue), and a freeway (SR-57). The arterials provide local access to the site via four entrances. Regional access is provided by the SR-57 Freeway and the Santa Ana Freeway (I-5) which passes from northwest to southeast south of the site. The existing Metrolink/Amtrack Station on the north portion of the site will be incorporated into the project, and a proposed monorail system along Katella Avenue will link Disneyland, the Arrowhead Pond, and the proposed site. Figure II-1 illustrates the existing surrounding circulation system.

The existing intersection capacity utilization (ICU) values based on existing lane configurations for the area surrounding the project site are summarized in Table II-1 and illustrated in Figure II-2 (actual ICU calculations are included in Appendix B). The ICU values are a means of representing peak hour volume/capacity ratios, with a value of .90 representing the upper threshold for level of service (LOS) "D". As the ICU table indicates, the intersections in the vicinity of the project are operating at acceptable levels of service during the AM and PM peak hours, with the exception of The City Drive and Chapman Avenue which is currently operating at LOS "E" during the AM and PM peak hours.



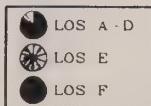
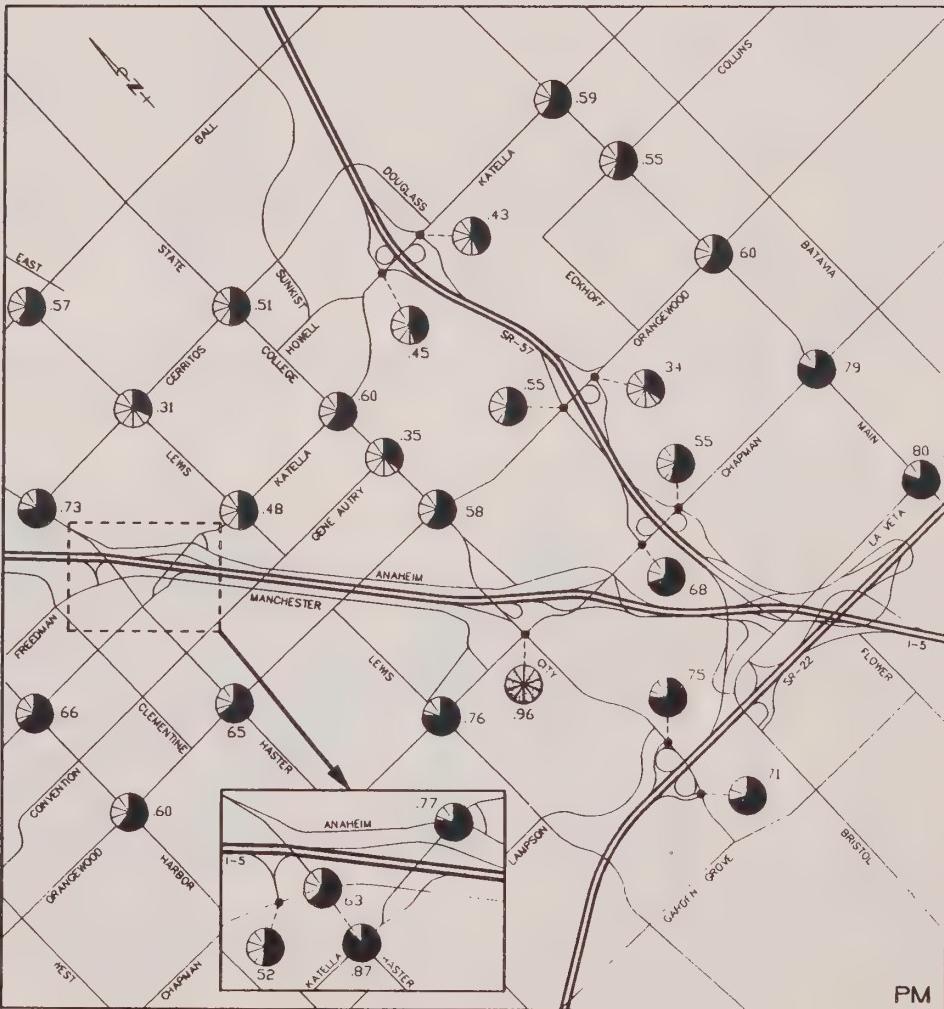
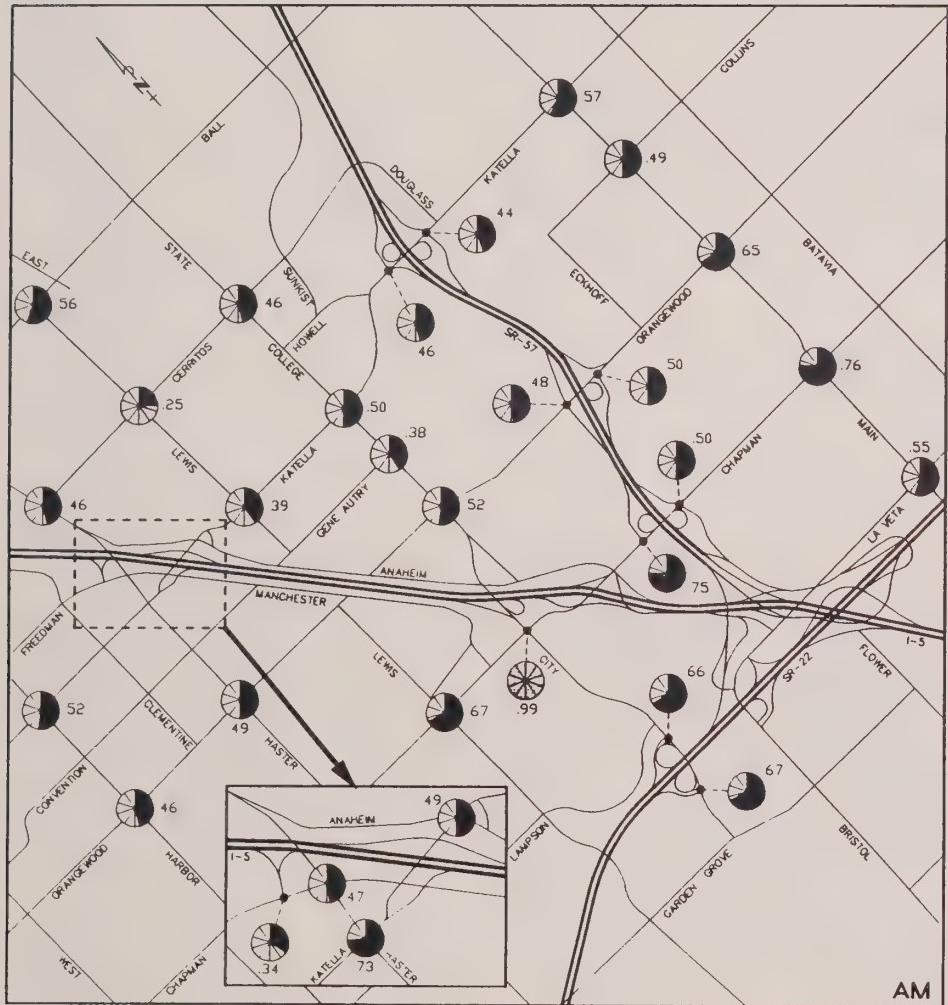
Figure II-1
CIRCULATION SYSTEM MAP

Table II-1
ANAHEIM SPORTS COMPLEX - EXISTING ICU SUMMARY

INTERSECTION	AM	PM
104. Harbor & Katella	.52	.66
106. Harbor & Orangewood	.46	.60
108. I-5 SB Ramps & Freedman	.34	.52
123. Anaheim & Cerritos	.46	.73
124. Haster & Freedman	.47	.63
125. Haster & Katella	.73	.87
126. Haster & Orangewood	.49	.65
127. I-5 NB Ramps & Katella	.49	.77
145. Lewis & Ball	.56	.57
146. Lewis & Cerritos	.25	.31
147. Lewis & Katella	.39	.48
160. State College & Cerritos	.46	.51
161. State College & Katella	.50	.60
162. State College & Gene Autry	.38	.35
163. State College & Orangewood	.52	.58
176. SR-57 SB Ramps & Katella	.46	.45
177. SR-57 NB Ramps & Katella	.44	.43
301. Lewis & Chapman	.67	.76
302. City & Chapman	.99 *	.96 *
303. City & SR-22 WB Ramps	.66	.75
304. City & SR-22 EB Ramps	.67	.71
307. SR-57 SB Ramps & Orangewood	.48	.55
308. SR-57 NB Ramps & Orangewood	.50	.34
309. SR-57 SB Ramps & Chapman	.75	.68
310. SR-57 NB Ramps & Chapman	.50	.55
311. Main & Katella	.57	.59
312. Main & Collins	.49	.55
313. Main & Orangewood	.65	.60
314. Main & Chapman	.76	.79
315. Main & La Veta	.55	.80

* Exceeds level of service "D"

Level of service ranges: .00 - .60 A
 .61 - .70 B
 .71 - .80 C
 .81 - .90 D
 .91 - 1.00 E
 Above 1.00 F



Level of service (LOS) range	
LOS A	.00-.80
LOS B	.81-.70
LOS C	.71-.80
LOS D	.81 .90
LOS E	.91 1.00
LOS F	Above 1.00

Figure II-2
TESTING ICU VALUES

III

PROJECT IMPACT ANALYSIS

This chapter describes the potential impacts of the proposed development upon the surrounding arterial network. Traffic generated by the proposed project is distributed over the year 2010 arterial network and the resulting capacity impacts are assessed.

TRIP GENERATION

As stated in Chapter I, new uses associated with the proposed project consist of a new 45,000 seat baseball stadium or a new 70,500 seat football stadium and renovated 45,000 seat Anaheim Stadium to be used for baseball, 750,000 square feet of Urban Entertainment Retail uses, 900,000 square feet of office space, and a 750 seat Youth Sports Center stadium. As indicated previously, the project proposes to replace 100,000 square feet of temporary exhibition space with permanent structures. This in conjunction with the 50,000 square feet of permanent exhibition space already on-site, would provide for a total of 150,000 square feet of exhibition space. However, since exhibition activities are already occurring on-site and no additional space is being proposed, this use would not contribute to any new traffic impacts, and therefore was not analyzed as part of this report. The proposed project will also replace a small amount of existing retail and fast food uses in the northwest corner of the project site.

Trip generation rates were derived for a typical weekday. The design weekday trip generation would occur on the day of an evening baseball game held in the new stadium. The trip rates for the office space and hotel were taken from the Anaheim Traffic Analysis Model (ATAM). The trip generation rates for the Urban Entertainment Retail uses were derived from trip rates for various recreational uses, including restaurant, movie theater, bowling alley, recreational community center

and specialty retail from the Institute of Transportation Engineers (ITE) and commercial recreation from the ATAM (the actual derivation method is included in Appendix A).

The land use assumed for the site in the General Plan land use database consists of 2,118,480 square feet of office space. A comparison of the General Plan land use trip generation and the proposed project trip generation is presented in Table III-1. As this trip generation comparison indicates, the proposed project will generate 9,109 more trips daily than the General Plan land use. During the AM peak hour, the proposed project will generate 1,621 fewer trips than the General Plan land use and during the PM peak hour the proposed project will generate 499 more trips.

Two cumulative projects in the vicinity of the project site which were originally assumed in the General Plan land use database were removed. These two projects, Central Park Towers and Stadium Business Park, consist of a total of 1,617,000 square feet of office space, 534 hotel rooms and 96,000 square feet of retail uses, and generate a total of 28,600 trips daily, of which 2,700 are generated during the AM peak hour and 3,100 are generated during the PM peak hour.

LONG-RANGE IMPACTS

Anaheim Traffic Analysis Model Assumptions

The traffic analysis for the Anaheim Sports Complex was conducted using the Anaheim Traffic Analysis Model (ATAM). This model is a computerized trip generation assignment and distribution tool that evaluates various land use and circulation system schemes. This model does not include any special treatment for transit or other transportation demand management (TDM) strategies other than that implicit in the Institute of Transportation Engineers trip rates. Therefore, the results of the ATAM for purposes of this traffic analysis may be conservative if any substantial portion of the contemplated regional transit and/or TDM plans are implemented. These plans include:

1. Orange County Major Investment Study for Urban Rail, Enhanced Bus, Transportation Systems Management, Freeway/Roadway (HOV), or No Build
2. Orange County Commuter Rail Study
3. SR-91 Freeway Widening and HOV Lanes
4. SR-57 Freeway Extension to I-405

Table III-1
PROPOSED PROJECT TRIP GENERATION SUMMARY

<u>LAND USE</u>	<u>UNITS</u>	--AM PEAK HOUR--			--PM PEAK HOUR--			<u>ADT</u>
		<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>	<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>	
TRIP RATE								
Entertainment Retail		.47	.27	.74	1.35	2.13	3.48	30.75
Hotel		.32	.37	.69	.43	.34	.77	9.45
Office		1.84	.23	2.07	.35	1.70	2.05	15.33
TRIP GENERATION								
Proposed Project								
Entertainment Retail	750.0 TSF	353	203	555	1,013	1,598	2,610	23,063
Hotel	500 Room	160	185	345	215	170	385	4,725
Office	900.0 TSF	1,656	207	1,863	315	1,530	1,845	13,797
TOTAL		2,169	595	2,764	1,543	3,298	4,841	41,585
General Plan								
Office	2,118.48 TSF	3,898	487	4,385	741	3,601	4,342	32,476

5. Transit Way Interchange at Cerritos Avenue and SR-57
6. Anaheim Stadium Metrolink/Amtrak Rail Station Improvement Project
7. Amtrak Commuter Rail Feasibility Study
8. I-5 "Intelligent Transportation Systems" -- Radio Advisory and Changeable Message Signs
9. SR-57/State College Boulevard "Smart Corridor" -- Radio Advisory, Changeable Message Signs, and Closed Circuit Television Cameras

Other more conventional regional arterial and highway improvements such as the Katella Avenue and Harbor Boulevard "Smart Street" project are included in the ATAM.

In addition, considerable interest and speculation continue to surround the potential future extension of the SR-57 Freeway from the I-5 Freeway southerly to link up with the I-405 Freeway and SR-73 Corridor. The ATAM does not include this segment of roadway either as a freeway, conventional arterial or toll road.

If any or all of these regional improvements are to materialize they could make a substantial contribution towards reducing the levels of traffic otherwise predicted by the ATAM for the Anaheim circulation system. However, in the absence of reasonable foreseeable commitments to funding and implementation of those regional improvements, they have not been included in the ATAM for its analysis of the Anaheim Sports Complex area.

Long-range volume projections in the vicinity of the project were taken from the year 2010 version of the ATAM. Traffic forecasts produced by the ATAM for future years reflect estimated levels of additional development within the City of Anaheim, as well as regional growth outside of the City.

The ATAM land use database originally assumed buildup of the General Plan development on the project site. This land use database was utilized for the year 2010 Base Case. The model was then revised to eliminate the General Plan land use on the site, and was replaced by the square footage of the proposed project to obtain volumes with the proposed project. Daily year 2010 Base Case volumes are illustrated in Figure III-1. Figure III-2 illustrates year 2010 with-project ADT volumes. The resulting with-project intersection capacity utilization (ICU) values were compared with the Base Case ICU values to determine the impact of the proposed project.

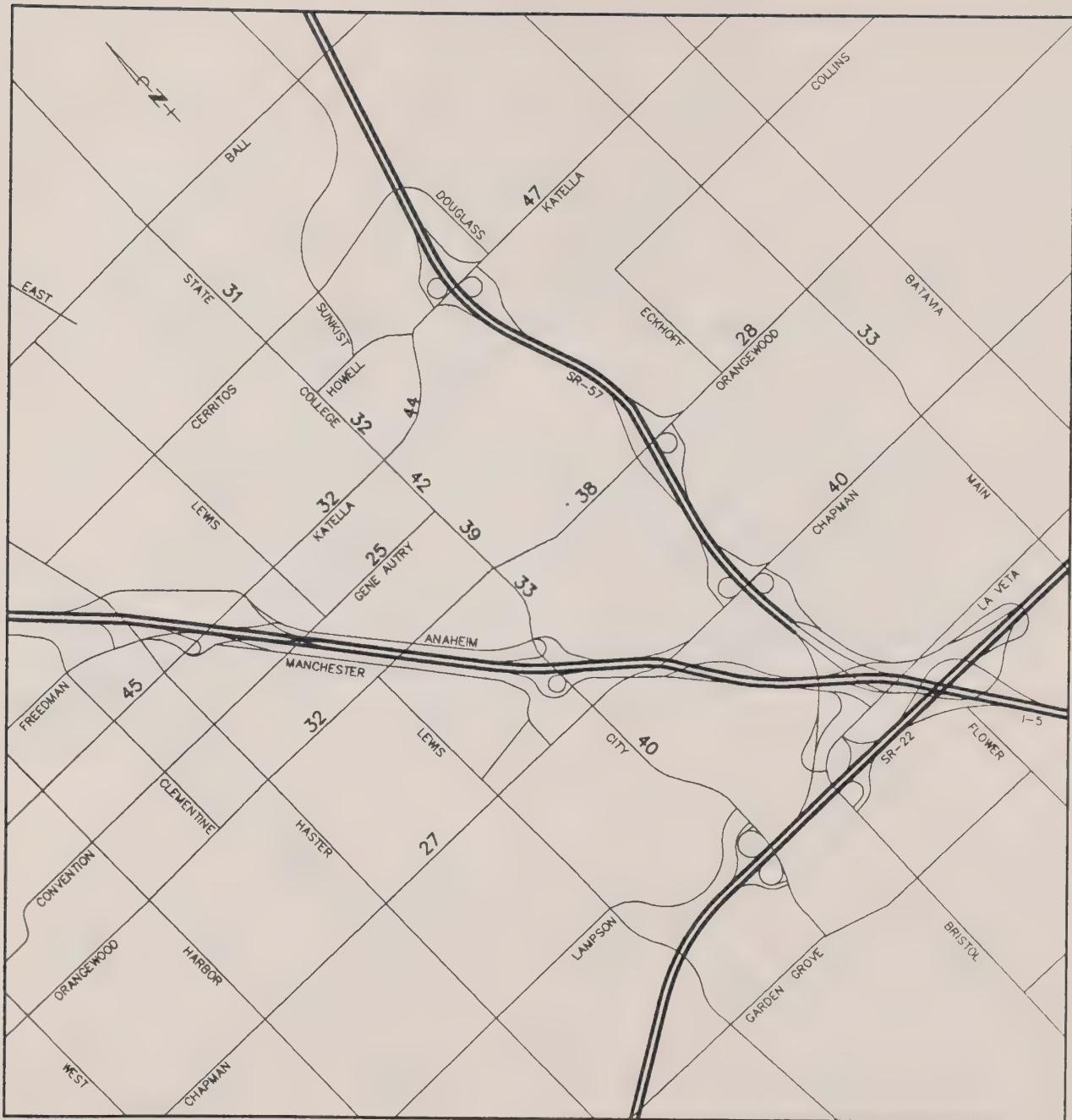


Figure III-1
2010 BASE CASE ADT VOLUMES (000s)

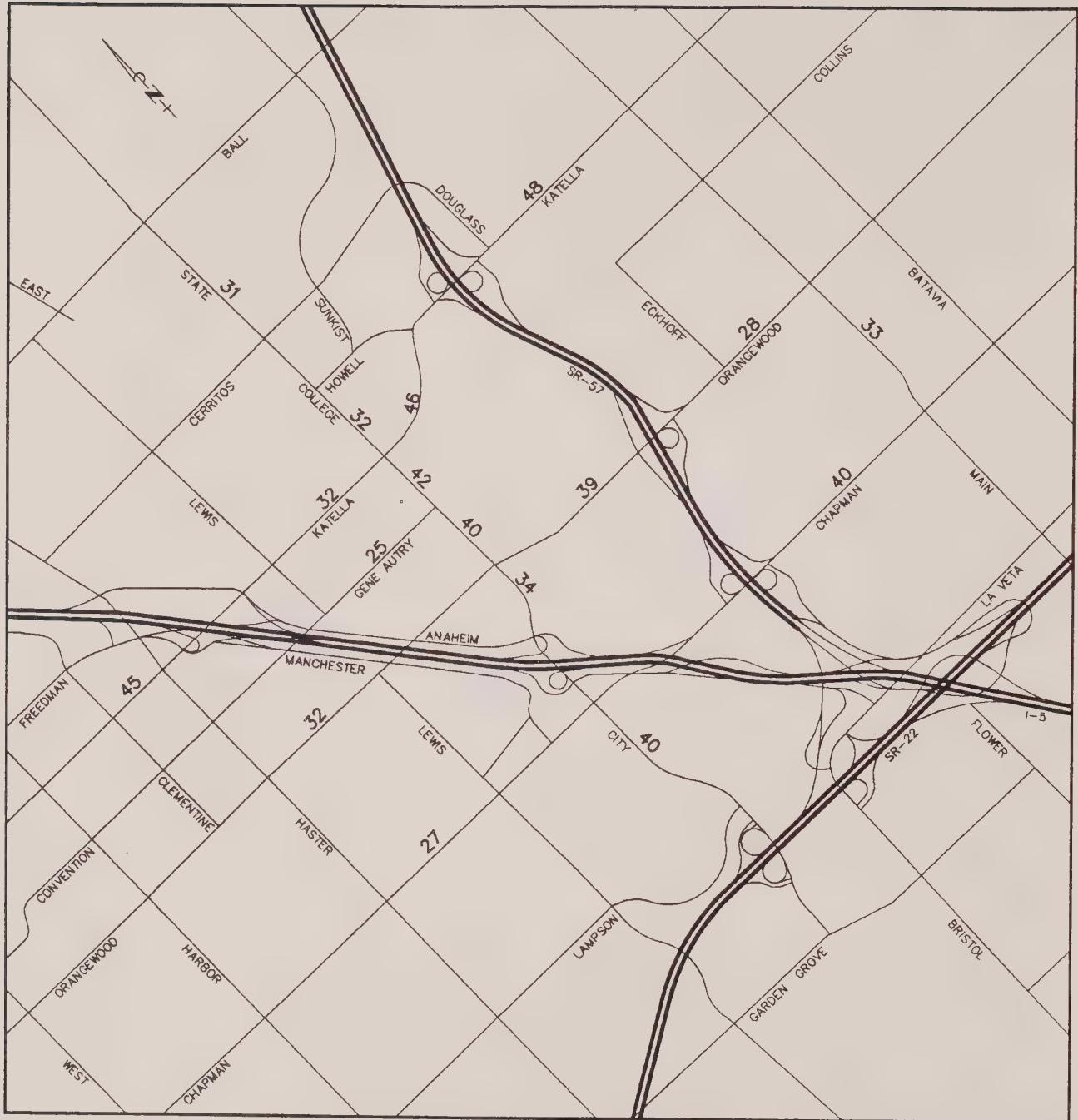


Figure III-2
2010 WITH-PROJECT ADT VOLUMES
(000s)

The 2010 Base Case and with-project ICU values are summarized in Table III-2 and are illustrated in Figures III-3 and III-4, respectively (actual ICU calculations are included in Appendix B). These ICU values are based on the planned 2010 circulation system discussed earlier. As this table indicates, two intersections operate above LOS "D" during the AM peak hour and three intersections operate above LOS "D" during the PM peak hour under 2010 Base Case conditions. Under with-project conditions, one intersection during the AM peak hour and three intersections during the PM peak hour operate above LOS "D".

The project causes a .02 increase in the PM peak hour ICU at State College Boulevard and Chapman Avenue, which operates at 1.08 under 2010 Base Case conditions; however, the Orange County Congestion Management Program (CMP) specifies that a project has no significant impact if the project causes less than a .10 increase in the ICU value at an intersection which reaches LOS "F" under base case conditions. Therefore, the proposed Anaheim Sports Complex has no significant impact on the 2010 Base Case conditions.

SHORT-RANGE IMPACTS

Short-range Base Case volume projections in the vicinity of the project were taken from the year 2000 version of the ATAM. Traffic forecasts produced by the ATAM for the year 2000 reflect estimated levels of development and circulation improvements assumed to be in place by the year 2000. Development of the proposed project by the year 2000 was assumed to be half the buildup development of the proposed project; therefore, the project's year 2000 impacts are estimated to be approximately half the incremental increase in the ICU value as a result of the proposed project under year 2010 conditions. Table III-3 summarizes the year 2000 Base Case and with-project ICU values (actual ICU calculation sheets are included in Appendix B). The 2000 Base Case and with-project ICU values are illustrated in Figure III-5 and Figure III-6, respectively.

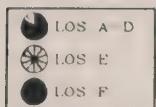
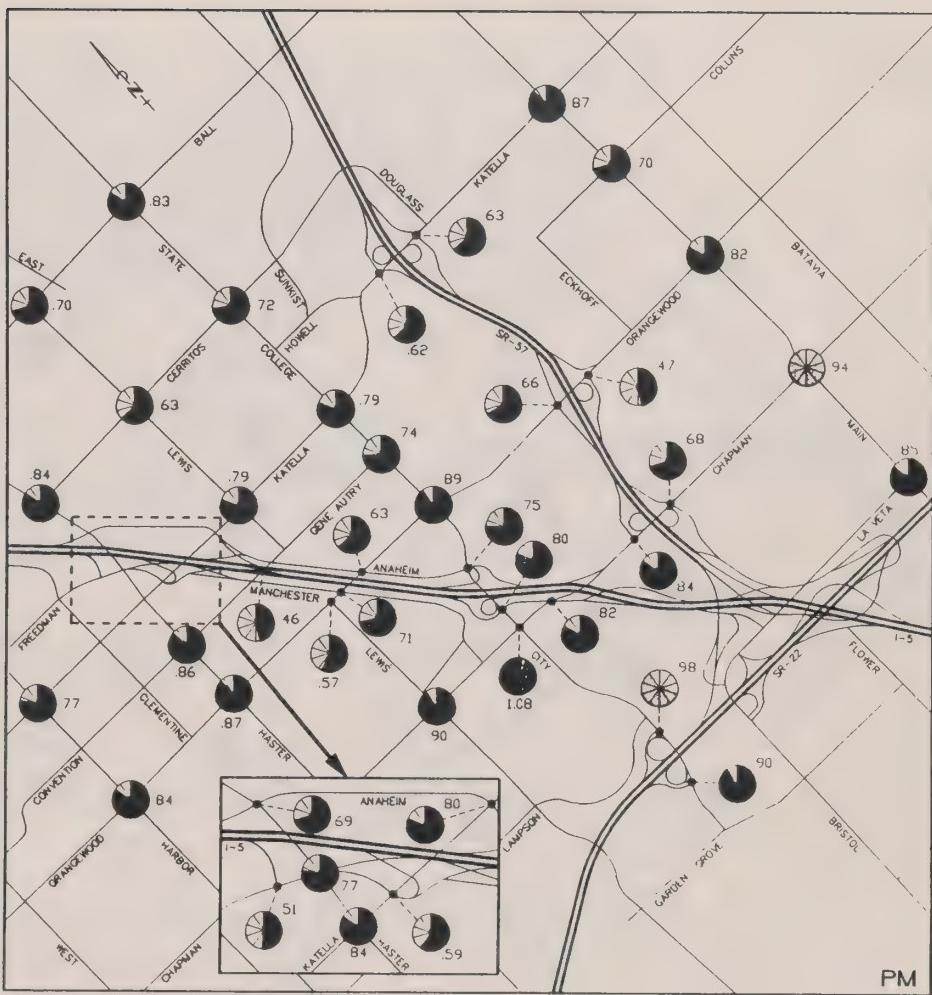
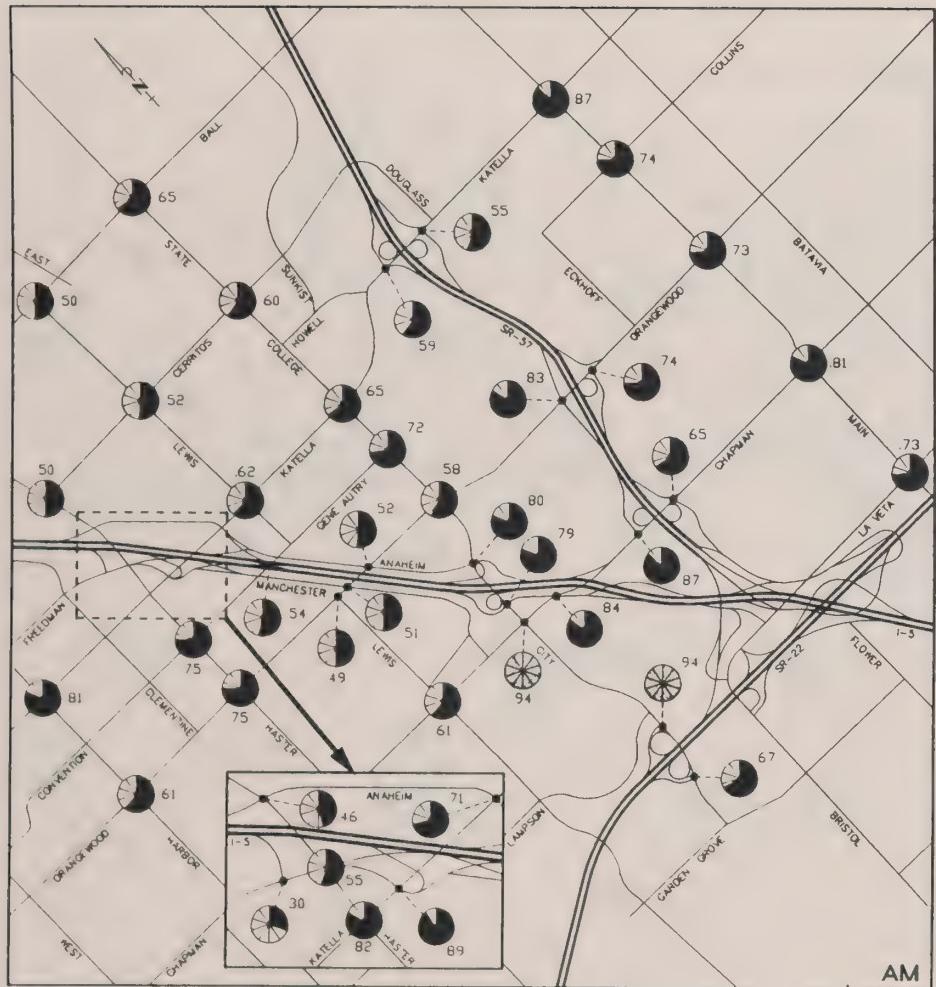
As the ICU table indicates, three intersections will operate at LOS "E" or worse under 2000 Base Case and with-project conditions. The project has no significant impact on any of the study intersections during the AM or PM peak hour under short-range conditions.

Table III-2
YEAR 2010 ICU SUMMARY

INTERSECTION	2010 BASE CASE		2010 WITH PROJECT	
	AM	PM	AM	PM
104. Harbor & Katella	.81	.77	.80	.76
106. Harbor & Orangewood	.61	.84	.60	.85
108. I-5 SB Ramps & Freedman	.30	.51	.29	.52
123. Anaheim & Cerritos	.50	.84	.50	.84
124. Haster & Freedman	.55	.77	.55	.77
125. Haster & Katella	.82	.84	.80	.83
126. Haster & Orangewood	.75	.87	.73	.88
127. I-5 NB Ramps & Katella	.71	.80	.69	.79
145. Lewis & Ball	.50	.70	.50	.70
146. Lewis & Cerritos	.52	.63	.52	.63
147. Lewis & Katella	.62	.79	.60	.78
159. State College & Ball	.65	.83	.63	.83
160. State College & Cerritos	.60	.72	.58	.72
161. State College & Katella	.65	.79	.63	.79
162. State College & Gene Autry	.72	.74	.78	.84
163. State College & Orangewood	.58	.89	.53	.85
176. SR-57 SB Ramps & Katella	.59	.62	.52	.65
177. SR-57 NB Ramps & Katella	.55	.63	.53	.64
228. Anaheim & Haster	.46	.69	.46	.68
229. Freedman & Katella	.89	.59	.89	.59
242. Haster & Gene Autry	.75	.86	.69	.86
244. Lewis & Orangewood	.49	.57	.47	.58
245. Manchester & Orangewood	.51	.71	.46	.73
246. Anaheim & Orangewood	.52	.63	.47	.62
247. I-5 HOV Ramps & Gene Autry	.54	.46	.49	.47
301. Lewis & Chapman	.61	.90	.60	.90
302. City & Chapman	.94*	1.08*	.94*	1.10*
303. City & SR-22 WB Ramps	.94*	.98*	.89	.97*
304. City & SR-22 EB Ramps	.67	.90	.64	.90
305. I-5 SB Ramps & Chapman	.84	.82	.84	.82
307. SR-57 SB Ramps & Orangewood	.83	.66	.76	.66
308. SR-57 NB Ramps & Orangewood	.74	.47	.75	.50
309. SR-57 SB Ramps & Chapman	.87	.84	.86	.85
310. SR-57 NB Ramps & Chapman	.65	.68	.65	.67
311. Main & Katella	.87	.87	.88	.86
312. Main & Collins	.74	.70	.73	.70
313. Main & Orangewood	.73	.82	.73	.81
314. Main & Chapman	.81	.94*	.81	.94*
315. Main & La Veta	.73	.85	.73	.85
316. State College & Anaheim	.80	.75	.77	.77
317. State College & I-5 SB Rmps	.79	.80	.77	.82

* Exceeds level of service "D"

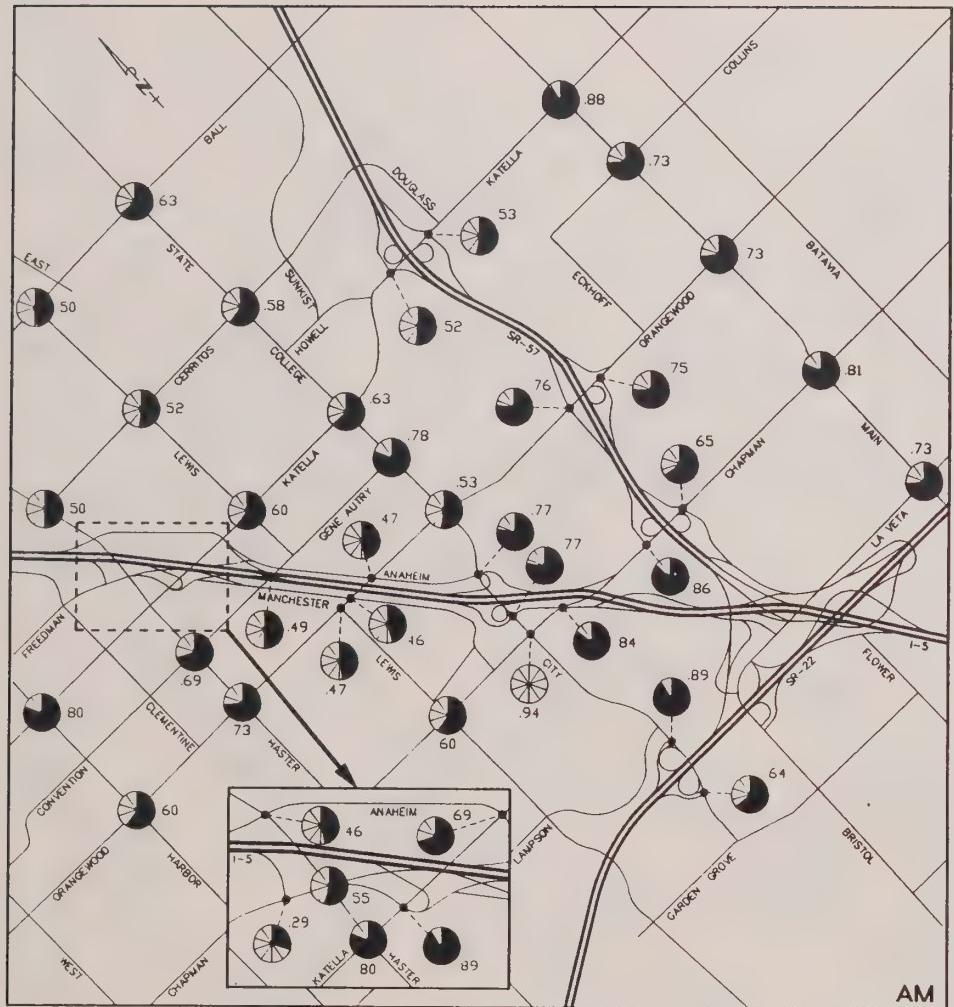
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.61 - .70 B
.71 - .80 C
.81 - .90 D
.91 - 1.00 E
Above 1.00 F



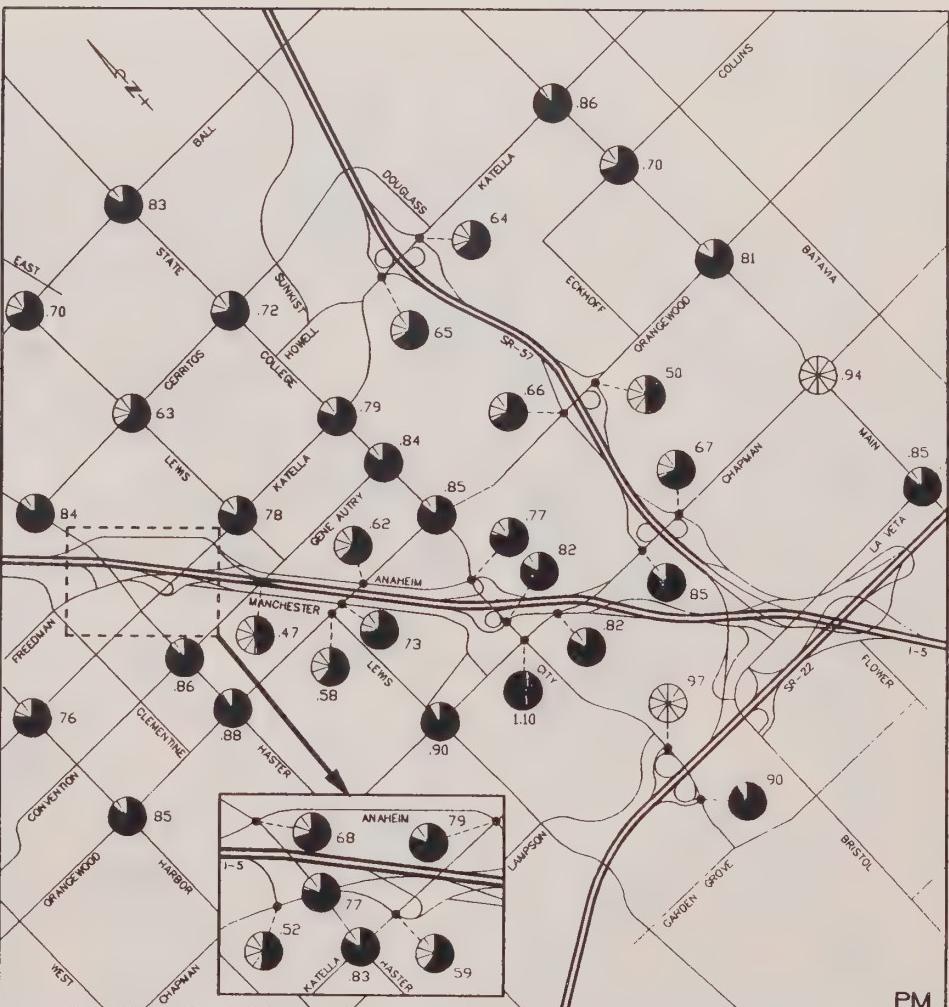
Level of service (LOS) range

LOS A	00 - .80	LOS D	.81 - .90
LOS B	.81 - .70	LOS E	.91 - 1.00
LOS C	.71 - .80	LOS F	Above 1.00

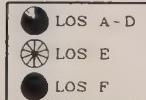
Figure III-3
2010 BASE CASE
ICU VALUES



AM



PM



Level of service (LOS) range:

LOS A	.00 - .80	LOS D	.81 - .90
LOS B	.81 - .70	LOS E	.91 - 1.00
LOS C	.71 - .80	LOS F	Above 1.00

Anaheim Sports Complex
Traffic Analysis

Figure III-4

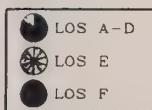
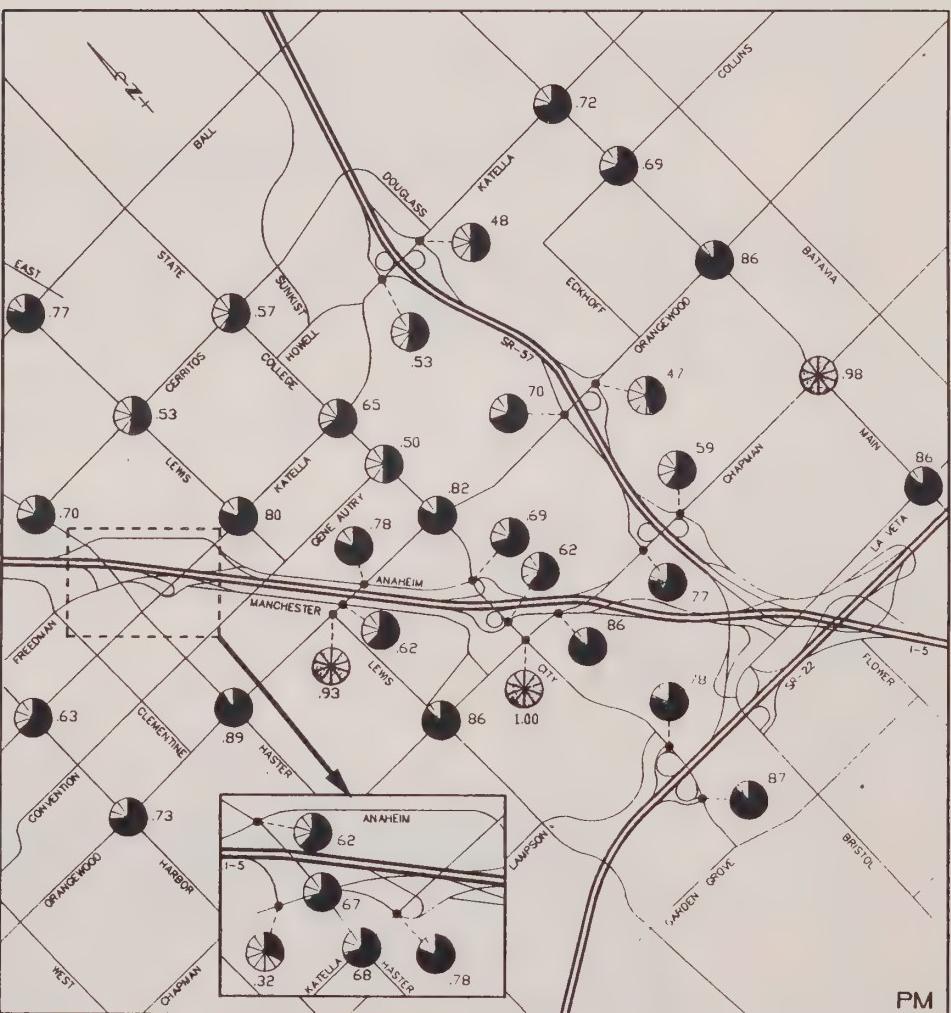
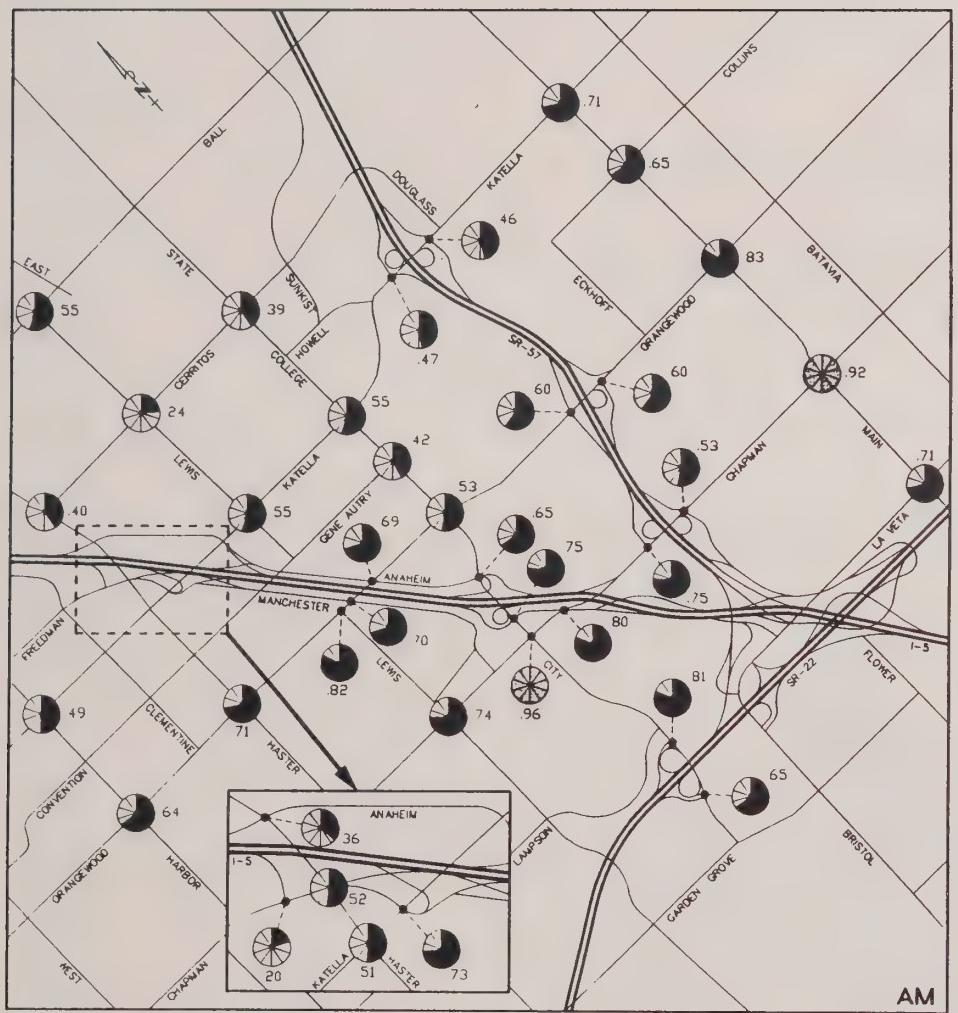
2010 WITH PROJECT
ICU VALUES

Table III-3
YEAR 2000 ICU SUMMARY

INTERSECTION	2000 BASE CASE		2000 WITH PROJECT	
	AM	PM	AM	PM
104. Harbor & Katella	.49	.63	.49	.63
106. Harbor & Orangewood	.64	.73	.64	.73
108. I-5 SB Ramps & Freedman	.20	.32	.20	.32
123. Anaheim & Cerritos	.40	.70	.40	.70
124. Haster & Freedman	.52	.67	.52	.67
125. Haster & Katella	.51	.68	.50	.68
126. Haster & Orangewood	.71	.89	.70	.89
145. Lewis & Ball	.55	.77	.55	.77
146. Lewis & Cerritos	.24	.53	.24	.53
147. Lewis & Katella	.55	.80	.54	.80
160. State College & Cerritos	.39	.57	.38	.57
161. State College & Katella	.55	.65	.54	.65
162. State College & Gene Autry	.42	.50	.45	.55
163. State College & Orangewood	.53	.82	.51	.80
176. SR-57 SB Ramps & Katella	.47	.53	.44	.54
177. SR-57 NB Ramps & Katella	.46	.48	.45	.48
228. Anaheim & Haster	.36	.62	.36	.62
229. Freedman & Katella	.73	.78	.73	.78
244. Lewis & Orangewood	.82	.93*	.81	.93*
245. Manchester & Orangewood	.70	.62	.68	.63
246. Anaheim & Orangewood	.69	.78	.67	.78
301. Lewis & Chapman	.74	.86	.74	.86
302. City & Chapman	.96*	1.00*	.96*	1.00*
303. City & SR-22 WB Ramps	.81	.78	.79	.78
304. City & SR-22 EB Ramps	.65	.87	.64	.87
305. I-5 SB Ramps & Chapman	.80	.86	.80	.86
307. SR-57 SB Ramps & Orangewood	.60	.70	.57	.70
308. SR-57 NB Ramps & Orangewood	.60	.47	.60	.48
309. SR-57 SB Ramps & Chapman	.75	.77	.75	.77
310. SR-57 NB Ramps & Chapman	.53	.59	.53	.59
311. Main & Katella	.71	.72	.71	.72
312. Main & Collins	.65	.69	.65	.69
313. Main & Orangewood	.83	.86	.83	.86
314. Main & Chapman	.92*	.98*	.92*	.98*
315. Main & La Veta	.71	.86	.71	.86
316. State College & Anaheim	.65	.69	.64	.70
317. State College & I-5 SB Ramps	.75	.62	.74	.63

* Exceeds level of service "D"

Level of service ranges: .00 - .60 A
 .61 - .70 B
 .71 - .80 C
 .81 - .90 D
 .91 - 1.00 E
 Above 1.00 F

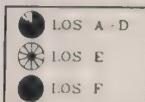
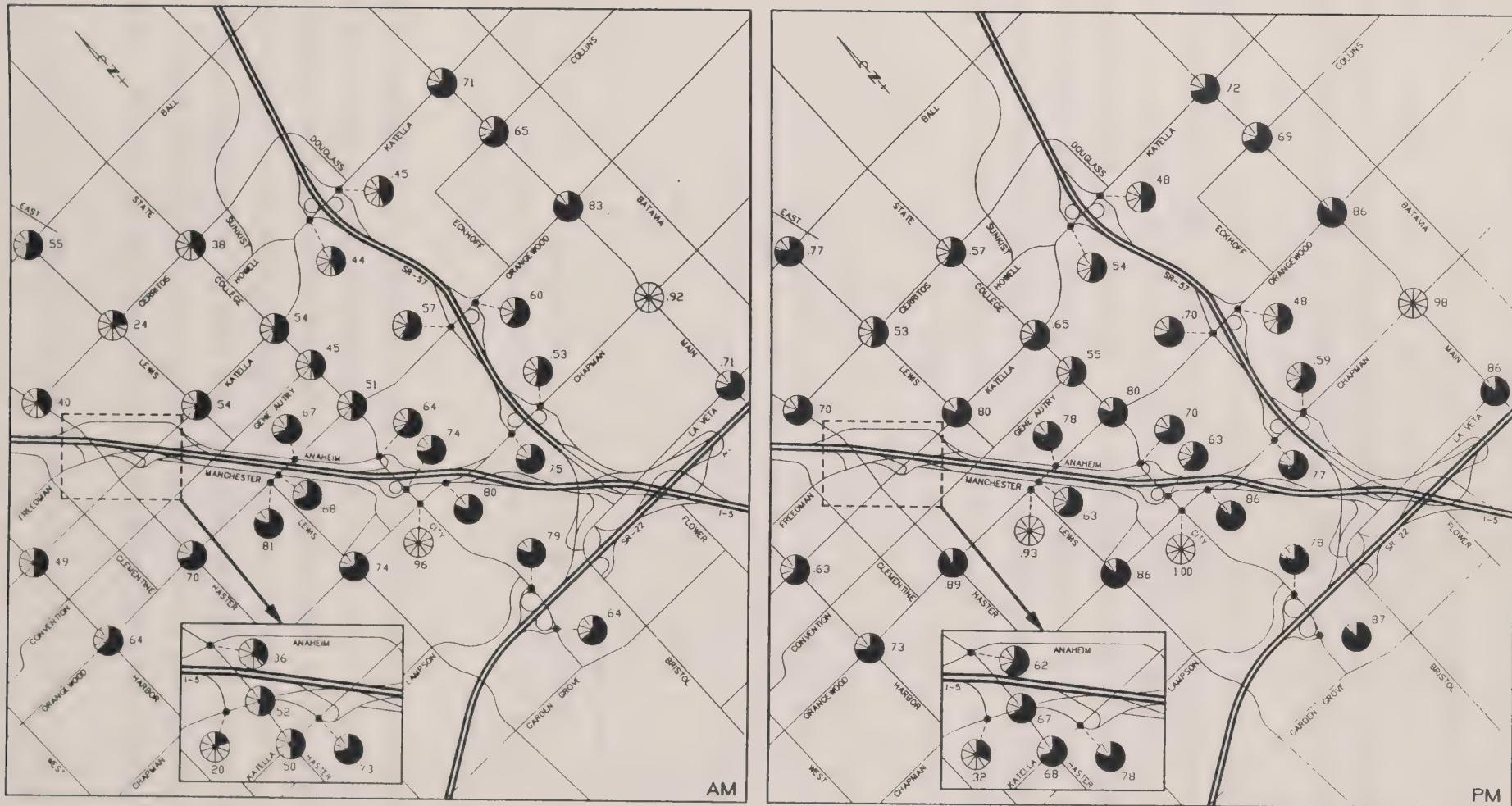


Level of service (LOS) range:

LOS A	.00-.80	LOS D	.81-.90
LOS B	.81-.70	LOS E	.91-1.00
LOS C	.71-.80	LOS F	Above 1.00

Figure III-5

2000 BASE CASE ICU VALUES



Level of service (LOS) range

LOS A	00 - 80	LOS D	81 - 90
LOS B	81 - 70	LOS E	91 - 100
LOS C	71 - 80	LOS F	Above 100

Anaheim Sports Complex
Traffic Analysis

Figure III-6
2000 WITH - PROJECT ICU VALUES

PROJECT ALTERNATIVES

Three alternatives to the proposed project have been identified for analysis. The alternatives consist of a No Project Alternative, a Reduced Density Alternative, and a Residential Alternative.

The No Project Alternative assumes development of the General Plan land use on the project site. This alternative was utilized as the Base Case against which the project was compared. The No Project Alternative generates 32,476 trips daily, 78 percent of the proposed project daily trip generation. During the AM peak hour, the No Project Alternative generates 4,385 trips, which is 159 percent of the proposed project AM peak hour trip generation. During the PM peak hour the No Project Alternative generates 4,342 trips, 90 percent of the proposed project PM peak hour trip generation. Overall, the No Project Alternative will have lesser of an impact on the surrounding circulation system and on-site parking than the proposed project.

The Reduced Density Alternative consists of a new 45,000 seat baseball stadium or a new 70,500 seat football stadium and renovated 45,000 seat Anaheim Stadium to be used for baseball, 300,000 square feet of Entertainment Retail uses, 500 hotel rooms, 900,000 square feet of office space, 100,000 square feet of exhibition space, and 16,000 on-site parking spaces. This alternative generates 27,747 trips daily, which is 67 percent of the proposed project daily trip generation. During the AM peak hour, the Reduced Density Alternative generates 2,430 trips, 88 percent of the proposed project AM peak hour trip generation, and during the PM peak hour, the Reduced Density Alternative generates 3,274 trips, 68 percent of the proposed project trips. The Reduced Density Alternative will have a slightly lesser impact on the surrounding circulation system and on-site parking than the proposed project.

The Residential Alternative consists of a new 45,000 seat baseball stadium or a new 70,500 seat football stadium and renovated 45,000 seat Anaheim Stadium to be used for baseball, 750,000 square feet of Entertainment Retail uses, 500 hotel rooms, 450,000 square feet of office space, 150,000 square feet of exhibition space, 360 apartment/condominium units, and 14,000 on-site parking spaces. The 360 residential units would be located in one of the previously proposed office towers located in the northern portion of the site. This alternative generates 37,570 trips daily, 90 percent of the proposed project daily trip generation. During the AM peak hour, the Residential Alternative

generates 2,074 trips, 75 percent of the proposed project trips, and during the PM peak hour, the Residential Alternative generates 4,229 trips, 87 percent of the proposed project PM peak hour trip generation. The Residential Alternative will have a nominally lesser impact on the surrounding circulation system and on-site parking than the proposed project. A trip generation comparison for the project alternatives is summarized in Table III-4.

SHARED PARKING

A total of 14,000 parking spaces have been identified on-site to accommodate the demands of the proposed Anaheim Sports Complex. Of the 14,000 on-site spaces, 300 spaces will be provided exclusively for the Metrolink Commuter Rail/Amtrak Station. It is recognized that mere application of the City's parking code does not adequately address the reality of the parking situation that will materialize. A major portion of the parking availability, with the exception of the 300 Metrolink Commuter Rail/Amtrak Station spaces, will be shared by the various users. An assessment of this shared use was prepared based on the Urban Land Institute's (ULI) shared use parking model supplemented by estimates of the stadium and entertainment retail's shared use. Three design event scenarios were analyzed: one for a weekday with a major daytime stadium event (i.e., a 1:00 PM baseball game with a maximum of 67 percent attendance), one for a typical weekday with a major evening stadium event (i.e., a baseball game at 7:05 PM with 85 percent attendance), and one for a Sunday with a major stadium event (i.e., a football game at 1:00 PM with 85 percent attendance). The results reveal that based on anticipated peak usages (i.e., no sharing of parking), a total of up to 19,458 parking spaces may be required on a weekday (during the evening) and 26,070 may be required on a Sunday game day. It should be noted this figure includes an estimate of the entertainment retail's peak usage.

When compared with the on-site parking supply of 14,000 spaces, it appears that a substantial parking deficiency is anticipated. However, when shared parking and available off-site parking are considered, adequate parking can be provided. On a weekday afternoon game day (based on an anticipated crowd of 30,000 spectators), the shared parking analysis indicates that 14,066 spaces will be occupied during the game, 14,000 of which can be accommodated on-site. Approximately 100 off-site spaces must be available during weekday daytime stadium events. The weekday evening game condition indicates a peak demand of 14,815 spaces will be occupied during the ball game, 14,000 of

Table III-4
PROJECT ALTERNATIVES TRIP GENERATION SUMMARY

<u>LAND USE</u>	---AM PEAK HOUR---			---PM PEAK HOUR---			<u>ADT</u>
	<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>	<u>IN</u>	<u>OUT</u>	<u>TOTAL</u>	
Proposed Project	2,169	595	2,764	1,543	3,298	4,841	41,585
No Project/No Development Alternative	3,898	487	4,385	741	3,601	4,342	32,476
Reduced Density Alternative	1,957	473	2,430	935	2,339	3,274	27,747
Residential Alternative	1,413	661	2,074	1,577	2,652	4,229	37,570

which can be accommodated on-site; therefore, an additional 815 spaces must be available off-site. On a Sunday game day, the shared parking analysis indicates that 20,667 spaces will be occupied during the game. Since 14,000 vehicles can be accommodated on-site, an additional 6,667 spaces must be made available off-site. Several locations in the project vicinity have large parking lots which could be utilized as off-site parking during major sporting events. Agreements should be established with surrounding developments to provide approximately 1,000 spaces needed during weekday game days and approximately 7,000 spaces needed on Sunday game days.

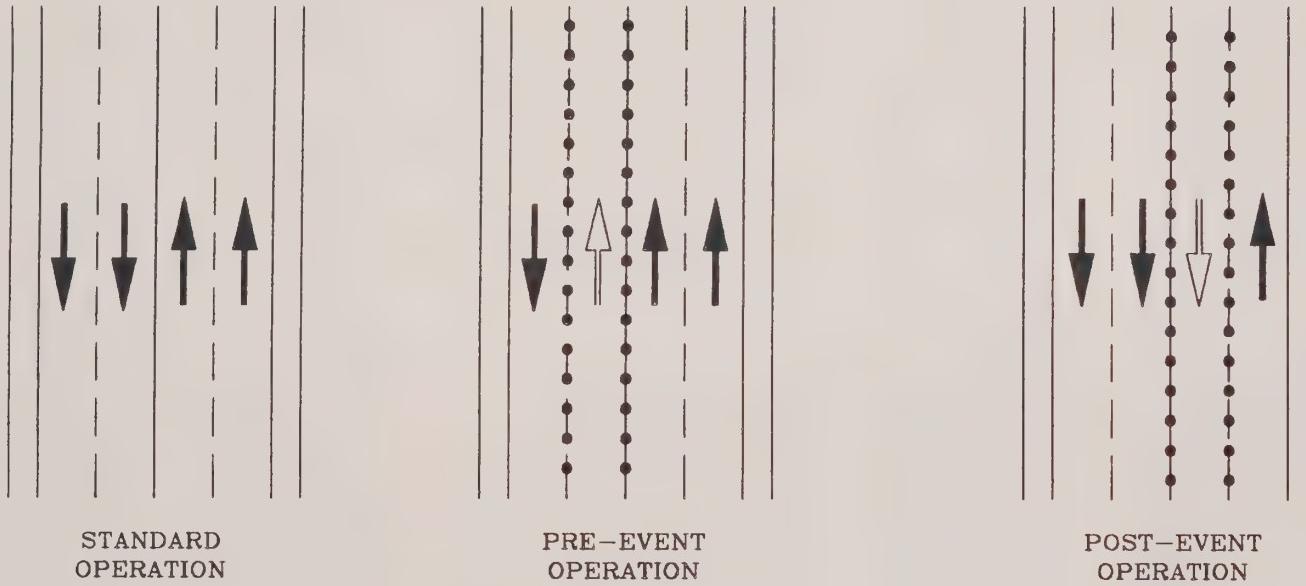
Development in the surrounding area can provide approximately 7,950 spaces on weekday evenings and weekends. For special events at the Anaheim Sports Complex, additional off-site parking is available at the Arrowhead Pond (5,342 existing spaces), provided that no event is scheduled at the Pond at the same time as the special event at the stadium.

The design event parking analysis is based on typical worst-case attendance at regular season baseball and football games with no event scheduled for the second stadium or for the exhibition center. In the event of play-off games or championship games (i.e., World Series or Super Bowl), related events may be scheduled for the exhibition center on game days. During these special games additional off-site parking with shuttle service to the stadium will be required.

SHUTTLE BUS OPERATIONS

A shuttle service will be established during major stadium events to transport patrons between the project site and the off-site parking facilities. A separate bus-only lane into/out of the site will be provided at selected entrances depending on the locations of the off-site parking to facilitate the entry and exit of the shuttle buses. This bus-only lane will be reversible so that before a major stadium event the bus-only lane allows entry by the shuttle buses which exit via a general purpose exit lane, and after a major stadium event the bus-only lane becomes an exit lane and shuttle buses re-enter the site via a general purpose entry lane. Figure III-7 conceptually illustrates the operation of the reversible lane.

During a weekday afternoon baseball game, approximately 100 off-site spaces may be utilized by patrons, and during a weekday night baseball game, approximately 1,000 off-site spaces will be



LEGEND

- GENERAL PURPOSE LANE
- BUS ONLY LANE
- PORTABLE DELINEATOR

Figure III-7
REVERSIBLE BUS LANE OPERATION

utilized by patrons. The typical vehicle occupancy for a baseball game is 2.85 persons per vehicle. The buses utilized for the shuttle service would be small buses which carry 20 to 25 persons. Therefore, during a weekday day game, approximately 15 shuttle-bus trips (100 vehicles x 2.85 persons/vehicle + 20 persons/bus) into and out of the project site will be made before and after the game. It is recognized that some patrons may choose to walk from the satellite parking facilities. However, for bus trip estimation purposes, these patrons are ignored. For a weekday night game, approximately 143 inbound and outbound shuttle bus trips (1,000 vehicles x 2.85 persons/vehicle + 20 persons/bus) will be made before and after the game.

During a Sunday afternoon football game, approximately 7,000 off-site parking spaces will be utilized by patrons. The typical vehicle occupancy at a football game is 3.00 persons per vehicle. Approximately 1,050 inbound and outbound shuttle bus trips (7,000 vehicles x 3.00 persons/vehicle + 20 persons/bus) will be made to accommodate off-site patrons before and after a Sunday football game. When such a volume of shuttle bus operations are anticipated, the need for separate bus lanes is clearly evident, particularly for evening and Sunday events.

APPENDIX A

URBAN ENTERTAINMENT RETAIL TRIP RATE DERIVATION

Possible "Entertainment Retail" Uses	PM PK HR Trip Rate (per TSF)	ADT Trip Rate (per TSF)
Restaurant (ITE)	7.4	94.0
Movie Theater (ITE)	4.0	
Bowling Alley (ITE)	3.5	
Recreational Community Center (ITE)	1.3	
Specialty Retail (ITE)		40.67
Commercial Retail (ATAM)	2.31	20.50
Average	3.70	

1. Compare Average Trip Rate with Commercial Retail Trip Rate from ATAM:

$$\frac{\text{Average Trip Rate}}{\text{Commercial Retail Trip Rate}} = \frac{3.70}{2.31} = 1.60$$

2. Round 1.60 factor down to 1.5

3. Entertainment Retail Trip Rate = 1.5 x Commercial Retail Trip Rate

$$\begin{aligned}\text{PM Peak Hour} &= 1.5 \times 2.31 = 3.47 \text{ trips/TSF} \\ \text{ADT} &= 1.5 \times 20.5 = 30.75 \text{ trips/TSF}\end{aligned}$$

4. Trip Rate Summary

	AM PEAK HOUR			PM PEAK HOUR			ADT
	IN	OUT	TOTAL	IN	OUT	TOTAL	
Urban Entertainment Retail	.47	.27	.74*	1.35	2.13	3.47	30.75

* ATAM Regional Commercial AM Peak Hour trip rate.

APPENDIX B

INTERSECTION CAPACITY UTILIZATION

Peak hour intersection volume/capacity ratios are calculated by means of intersection capacity utilization (ICU) values. ICU calculations were performed for the intersections shown in Figure B-1. For simplicity, signalization is assumed at each intersection. Precise ICU calculations of existing non-signalized intersections would require a more detailed analysis.

The procedure is based on the critical movement methodology, and shows the amount of capacity utilized by each critical move. A capacity of 1700 vehicles per hour (VPH) per lane is assumed together with a .05 clearance interval. A "de-facto" right-turn lane is used in the ICU calculation for cases where a curb lane is wide enough to separately serve both thru and right-turn traffic (typically with a width of 19 feet from curb to outside of thru-lane with parking prohibited during peak periods). Such lanes are treated the same as striped right-turn lanes during the ICU calculations, but they are denoted on the ICU calculation worksheets using the letter "d" in place of a numerical entry for right-turn lanes.

The methodology also incorporates a check for right-turn capacity utilization. Both right-turn-on-green (RTOG) and right-turn-on-red (RTOR) capacity availability are calculated and checked against the total right-turn capacity need. If insufficient capacity is available, then an adjustment is made to the total capacity utilization value. The following example shows how this adjustment is made.

Example For Northbound Right

1. Right-Turn-On-Green (RTOG)

If NBT is critical move, then:

$$RTOG = V/C(NBT)$$

Otherwise,

$$RTOG = V/C(NBL) + V/C(SBT) - V/C(SBL)$$

2. Right-Turn-On-Red (RTOR)

If WBL is critical move, then:

$$RTOR = V/C(WBL)$$

Otherwise,

$$RTOR = V/C(EBL) + V/C(WBT) - V/C(EBT)$$

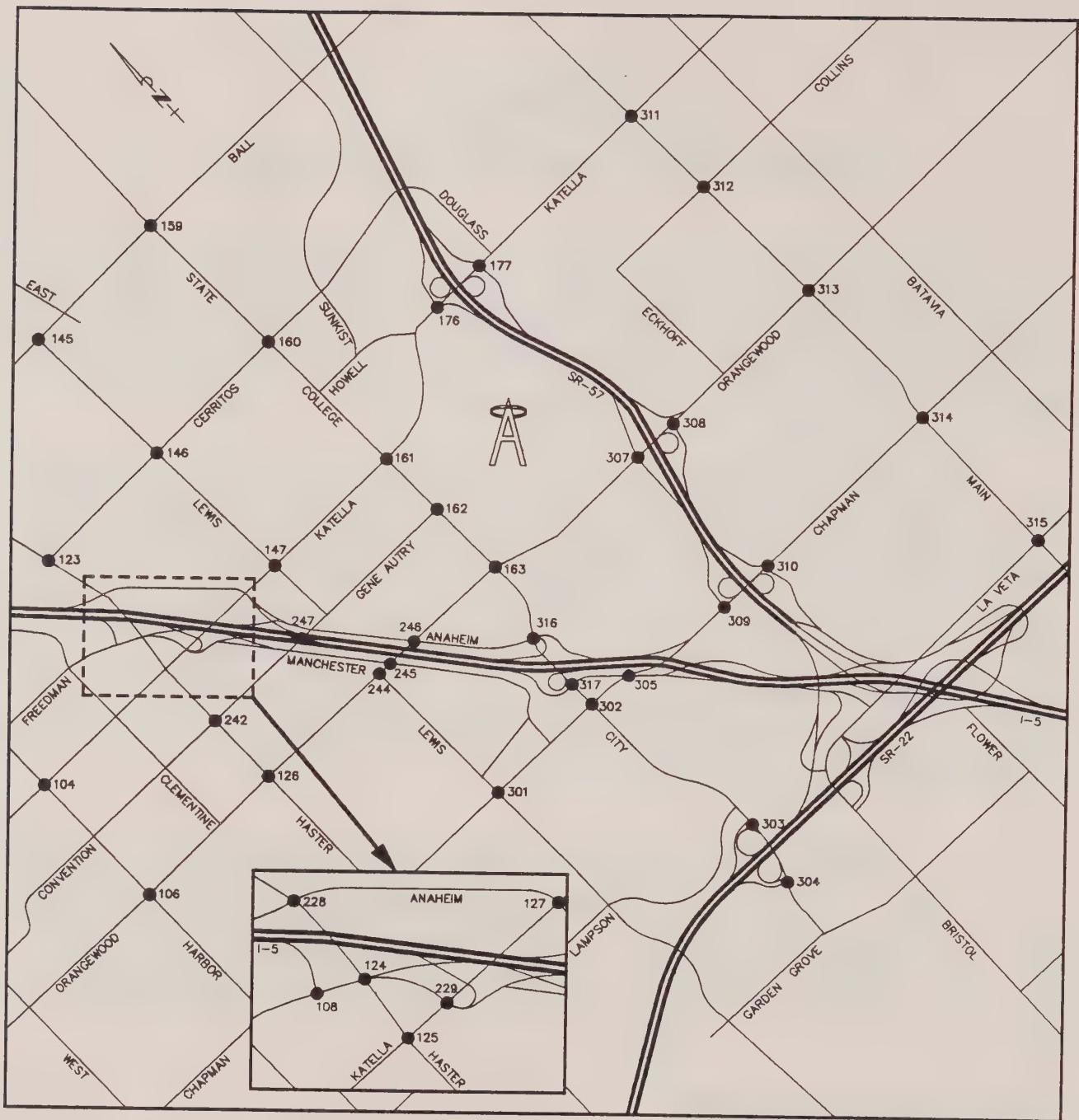


Figure B-1
INTERSECTION LOCATION MAP

3. Right-Turn Overlap Adjustment

If the northbound right is assumed to overlap with the adjacent westbound left, adjustments to the RTOG and RTOR values are made as follows:

$$\text{RTOG} = \text{RTOG} + \text{V/C (WBL)}$$

$$\text{RTOR} = \text{RTOR} - \text{V/C (WBL)}$$

4. Total Right-Turn Capacity (RTC) Availability For NBR

$$\text{RTC} = \text{RTOG} + \text{factor} \times \text{RTOR}$$

Where factor = RTOR saturation flow factor (75%)

Right-turn adjustment is then as follows: Additional ICU = V/C (NBR) - RTC

A zero or negative value indicates that adequate capacity is available and no adjustment is necessary. A positive value indicates that the available RTOR and RTOG capacity does not adequately accommodate the right-turn V/C, therefore the right-turn is essentially considered to be a critical movement. In such cases, the right-turn adjustment is noted on the ICU worksheet and it is included in the total capacity utilization value. When it is determined that a right-turn adjustment is required for more than one right-turn movement, the word "multi" is printed on the worksheet instead of an actual right-turn movement reference, and the right-turn adjustments are cumulatively added to the total capacity utilization value. In such cases, further operational evaluation is typically carried out to determine if under actual operational conditions, the critical right-turns would operate simultaneously, and therefore a right-turn adjustment credit should be applied.

Shared Lane V/C Methodology

For intersection approaches where shared usage of a lane is permitted by more than one turn movement (e.g., left/thru, thru/right, left/thru/right), the individual turn volumes are evaluated to determine whether dedication of the shared lane is warranted to any one given turn movement. The following example demonstrates how this evaluation is carried out:

Example for Shared Left/Thru Lane

1. Average Lane Volume (ALV)

$$\text{ALV} = \frac{\text{Left-Turn Volume} + \text{Thru Volume}}{\text{Total Left} + \text{Thru Approach Lanes (including shared lane)}}$$

2. ALV for Each Approach

$$\text{ALV (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Lanes (including shared lane)}}$$

$$\text{ALV (Thru)} = \frac{\text{Thru Volume}}{\text{Thru Approach Lanes (including shared lane)}}$$

3. Lane Dedication is Warranted

If ALV (Left) is greater than ALV then full dedication of the shared lane to the left-turn approach is warranted. Left-turn and thru V/C ratios for this case are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (including shared lane)}}$$

$$\text{V/C (Thru)} = \frac{\text{Thru Volume}}{\text{Thru Approach Capacity (excluding shared lane)}}$$

Similarly, if ALV (Thru) is greater than ALV then full dedication to the thru approach is warranted, and left-turn and thru V/C ratios are calculated as follows:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Left Approach Capacity (excluding shared lane)}}$$

$$\text{V/C (Thru)} = \frac{\text{Thru Volume}}{\text{Thru Approach Capacity (including shared lane)}}$$

4. Lane Dedication is not Warranted

If ALV (Left) and ALV (Thru) are both less than ALV, the left/thru lane is assumed to be truly shared and each left, left/thru or thru approach lane carries an evenly distributed volume of traffic equal to ALV. A combined left/thru V/C ratio is calculated as follows:

$$\text{V/C (Left/Thru)} = \frac{\text{Left-Turn Volume} + \text{Thru Volume}}{\text{Total Left + Thru Approach Capacity (including shared lane)}}$$

This V/C (Left/Thru) ratio is assigned as the V/C (Thru) ratio for the critical movement analysis and ICU summary listing.

If split phasing has not been designated for this approach, the relative proportion of V/C (Thru) that is attributed to the left-turn volume is estimated as follows:

If approach has more than one left-turn (including shared lane), then:

$$\text{V/C (Left)} = \text{V/C (Thru)}$$

If approach has only one left-turn lane (shared lane), then:

$$\text{V/C (Left)} = \frac{\text{Left-Turn Volume}}{\text{Single Approach Lane Capacity}}$$

If this left-turn movement is determined to be a critical movement, the V/C (Left) value is posted in brackets on the ICU summary printout.

These same steps are carried out for shared thru/right lanes. If full dedication of a shared thru/right lane to the right-turn movement is warranted, the right-turn V/C value calculated in step three is checked against the RTOR and RTOG capacity availability if the option to include right-turns in the V/C ratio calculations is selected.

When an approach contains more than one shared lane (e.g., left/thru and thru/right), steps one and two listed above are carried out for the three turn movements combined. Step four is carried out if dedication is not warranted for either of the shared lanes. If dedication of one of the shared lanes is warranted to one movement or another, step three is carried out for the two movements involved, and then steps one through four are repeated for the two movements involved in the other shared lane.

TRAFFIC STUDY APPENDICES

**The Following Appendices are Available for Review at the
City of Anaheim Planning Department:**

- Appendix A: Urban Entertainment Retail Trip Rate Derivation
- Appendix B: Intersection Capacity Utilization
- Appendix C: Land Use Trip Generation
- Appendix D: Shared Parking Analysis

APPENDIX D
AIR QUALITY MODEL CALCULATIONS

(Available for Review at the City of Anaheim Planning Department)

APPENDIX E
NOISE MODEL CALCULATIONS

(Available for Review at the City of Anaheim Planning Department)

APPENDIX F
CULTURAL RESOURCES RESPONSE LETTER



Regional Information Center

Los Angeles, Orange, Ventura Counties

June 23, 1995

Marisa Y. Liu
Michael Brandman Associates
17310 Red Hill Avenue, Suite 250
Irvine, California 92714

RE: Records Search for Anaheim Sports Center EIR, Anaheim and Orange Quadrangles.

Dear Ms. Liu,

As per your request of June 12, 1995, we have conducted a records search for the above referenced project. This search included a review of all recorded historic and prehistoric archaeological sites within the project area, as well as a review of all known cultural resource survey and excavation reports. In addition, we have checked our file of historic maps, the National Register of Historic Places, the California State Historic Resources Inventory, the listing of California Historical Landmarks, and The California Points of Historical Interest. The following is a discussion of our findings regarding the project area.

Due to the sensitive nature of cultural resources, archaeological site locations are not released.

PREHISTORIC RESOURCES:

No prehistoric archaeological sites have been identified within a one mile radius of the project area.

HISTORIC RESOURCES:

No historic archaeological sites have been identified within a one mile radius of the project area. Inspection of our historic maps -- Anaheim (1896 & 1942) 15' series -- indicated that in 1896 the Santa Ana River was perennial and consisted of several braided channels flowing through a wash. It was still unleveed. Just west of the river within a one mile radius of the project area a few buildings and several developed roads had been built. East of the river several buildings and an open street grid pattern had been built. One bridge was mapped as crossing over the Santa Ana River. Both the Southern Pacific Railroad and the Atchison, Topeka, and Santa Fe Railroad passed through the one mile radius of the project area.

By 1942 Santa Ana River had been leveed. An open street grid pattern and several buildings existed on either side of the river and a few bridges had been built over the river. Ball Road, Katella Avenue, Chapman Avenue, Lewis Street, Placentia Avenue, and Main Street had all been labeled on the 1942 Anaheim 15' Quadrangle. In 1942 a road that followed a section of the same route that the Santa Ana Freeway follows today was labeled US Route 101. At a road located where Anaheim Boulevard is located today US Route 101 headed north through the city of Anaheim. By 1942 an additional branch of the Southern Pacific Railroad had been built, connecting the city of Anaheim with the

1896 branch of the Southern Pacific Railroad. By 1942 the city of Orange had expanded into the one mile radius of the project area. Numerous buildings and a dense street grid pattern had been built within the city. Power transmission lines had also been built through the one mile radius of the project area.

The California State Historic Resources Inventory lists over one hundred properties within the city of Anaheim, over one hundred properties within the city of Garden Grove, and numerous properties within the city of Orange. A list of these properties is available to you upon request.

The National Register of Historic Places lists no properties within a one mile radius of the project area.

The California Historical Landmarks (1990) of the Office of Historic Preservation, California Department of Parks and Recreation, lists no Landmarks within a one mile radius of the project area.

The California Points of Historical Interest (1992), of the Office of Historic Preservation California Department of Parks and Recreation, lists no properties within a one mile radius of the project area.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS:

Nine surveys and/or excavations have been conducted within a one mile radius of the project area. Survey O-270 intersects the project area.

RECOMMENDATIONS

It is our opinion that no archaeological work is needed prior to approval of the project plans but a halt-work condition should be in place in the event of cultural resources being discovered during construction.

If you have any questions regarding our results or the recommendations presented herein, please feel free to contact our office at (310) 825-1980.

Invoices are mailed approximately two weeks after records searches are completed. This enables your firm to request further information under the same invoice number. Please reference the invoice number listed below when making inquiries. Requests made after invoicing necessitate the preparation of a separate invoice with a \$15.00 handling fee.

Sincerely,

Michelle Duncan

Michelle Duncan
Staff Archaeologist

Enclosures:

- () Site list
- () SOPA list
- () Invoice# 5723

APPENDIX G
HAZARDOUS SITES DATABASE REPORT

SITE ASSESSMENT PLUS REPORT

PROPERTY INFORMATION	CLIENT INFORMATION
Project Name/Ref #: Not Provided ANAHEIM SPORTS CENTER SEE MAP ANAHEIM, CA 92668 Cross Street: STATE COLLEGE/57 FWY/ORANGE WOOD AVE Latitude/Longitude: (33.802914, 117.886938)	JULIE GAA JBG ENVIRONMENTAL-SAN DIEGO 4875 SANTA CRUZ AVE SAN DIEGO, CA 92107

Site Distribution Summary			within 1/8 mile	1/8 to 1/4 mile	1/4 to 1/2 mile	1/2 to 1 mile
Agency / Database - Type of Records						
A) Databases searched to 1 mile:						
US EPA	NPL	National Priority List	0	0	0	0
US EPA	CORRACTS	RCRA Corrective Actions	0	0	0	0
US EPA	TSD	RCRA permitted treatment, storage, disposal facilities	0	0	0	0
STATE	SPL	State equivalent priority list	0	0	0	0
B) Databases searched to 1/2 mile:						
US EPA	CERCLIS	Sites under review by US EPA	0	0	2	-
STATE	SCL	State equivalent CERCLIS list	0	0	2	-
STATE REG CO	LUST	Leaking Underground Storage Tanks	3	3	8	-
STATE/REG/CO	SWLF	Permitted as solid waste landfills, incinerators, or transfer stations	0	0	0	-
STATE	DEED RSTR	Sites with deed restrictions	0	0	0	-
STATE	CORTESE	State index of properties with hazardous waste	1	0	2	-
STATE	TOXIC PITS	Toxic Pits cleanup facilities	0	0	0	-
C) Databases searched to 1/4 mile:						
US EPA	RCRA Viol	RCRA violations/enforcement actions	0	0	-	-
US EPA	TRIS	Toxic Release Inventory database	0	0	-	-
STATE	UST/AST	Registered underground or aboveground storage tanks	3	2	-	-
COUNTY	UNIQUE CO	Unique county databases	0	0	-	-
D) Databases searched to 1/8 mile:						
US EPA	ERNS	Emergency Response Notification System of spills	0	-	-	-
US EPA	GNRTR	RCRA registered small or large generators of hazardous waste	2	-	-	-

This geographic database search meets the American Society for Testing Materials (ASTM) standards for a government records review. A (-) indicates the search distance exceeds ASTM search parameters.

LIMITATION OF LIABILITY

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NOTES



For more information call VISTA Environmental Information at 1 - 800 - 767 - 0403

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Version 2.3

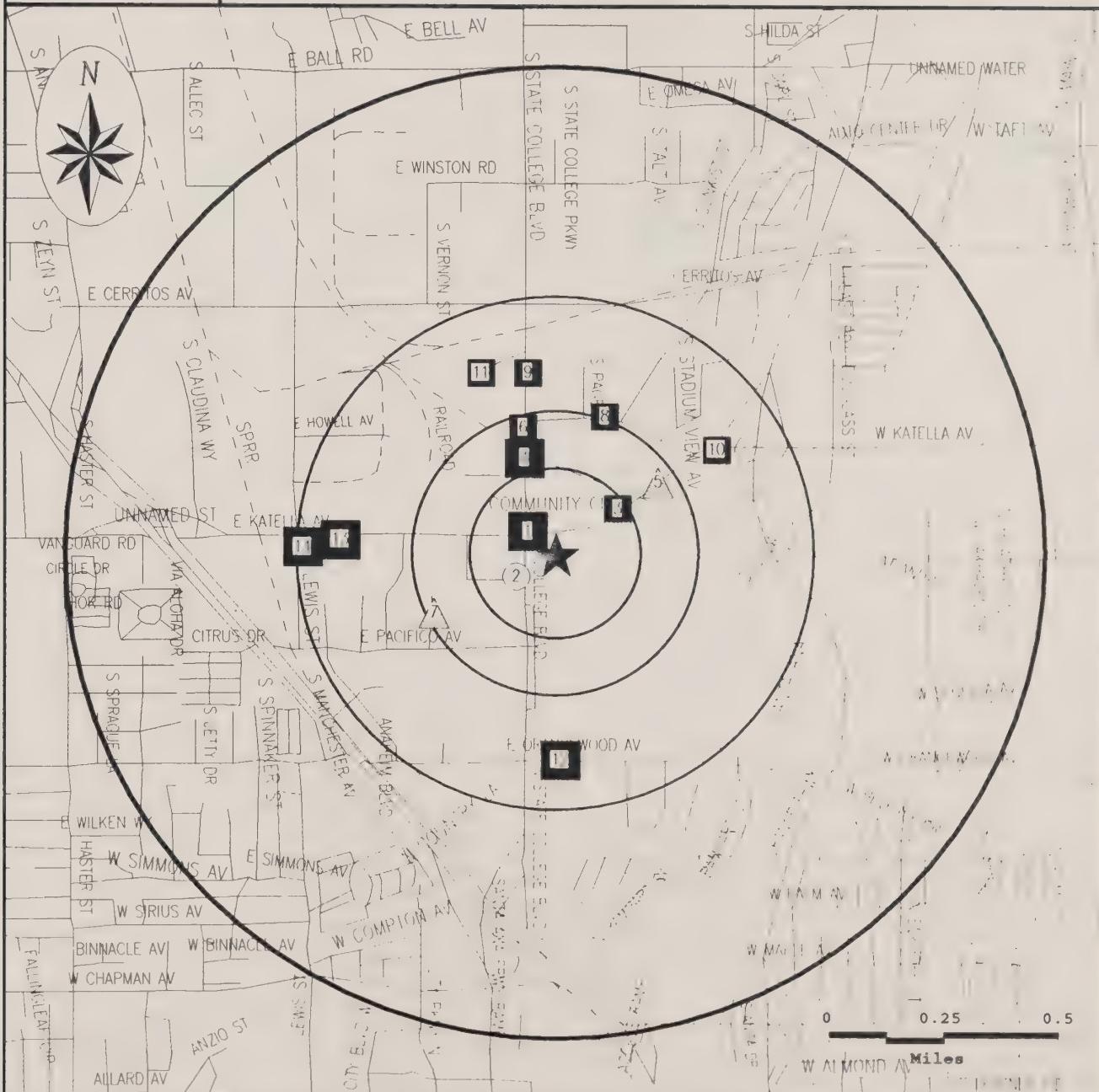
Date of Report: July 13, 1995

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SITE ASSESSMENT PLUS REPORT

Map of Sites within One Mile



For More Information Call VISTA Environmental Information at 1 - 800 - 767 - 0403

Report ID: 078584-001

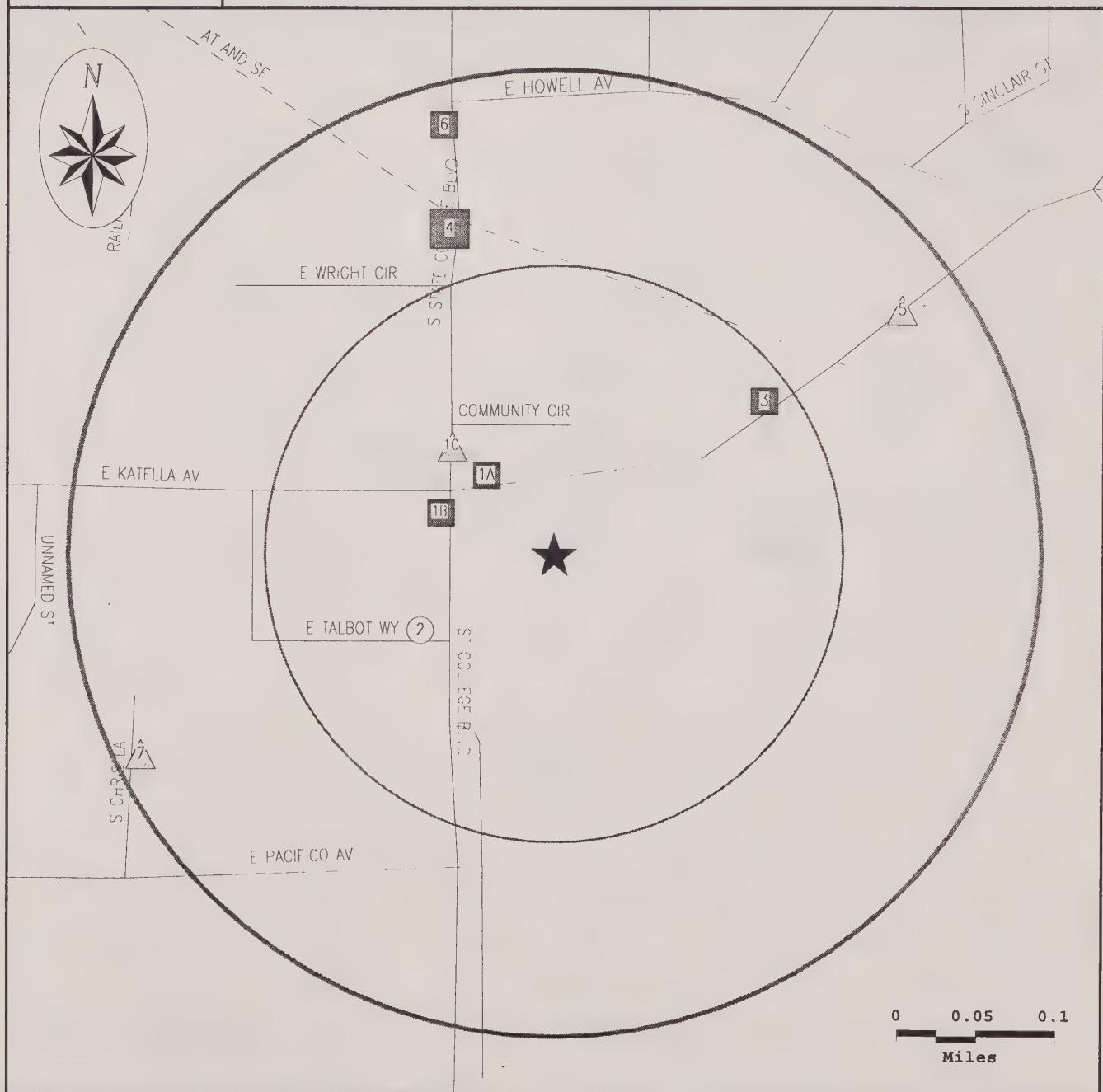
Date of Report: July 13, 1995

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SITE ASSESSMENT PLUS REPORT

Map of Sites within Quarter Mile



Subject Site	Category: Databases Searched to:	A 1 mi.	B 1/2 mi.	C 1/4 mi.	D 1/8 mi.
★	Single Sites	◆	■	△	()
	Multiple Sites	◆◆	■■	△△	() ()
Roads	NPL, SPL,				
Highways	TSD,				
Railroads	CORRACTS				
Rivers or Water Bodies	CERCLIS,				
Utilities	SCL, LUST,				
	SWLF				
	TRIS,				
	UST				
	ERNS,				
	GENERATORS				

If additional databases are listed in the cover page of the report they are also displayed on this map. The map symbol used corresponds to the database category letter A,B,C,D.

For More Information Call VISTA Environmental Information at 1 - 800 - 767 - 0403

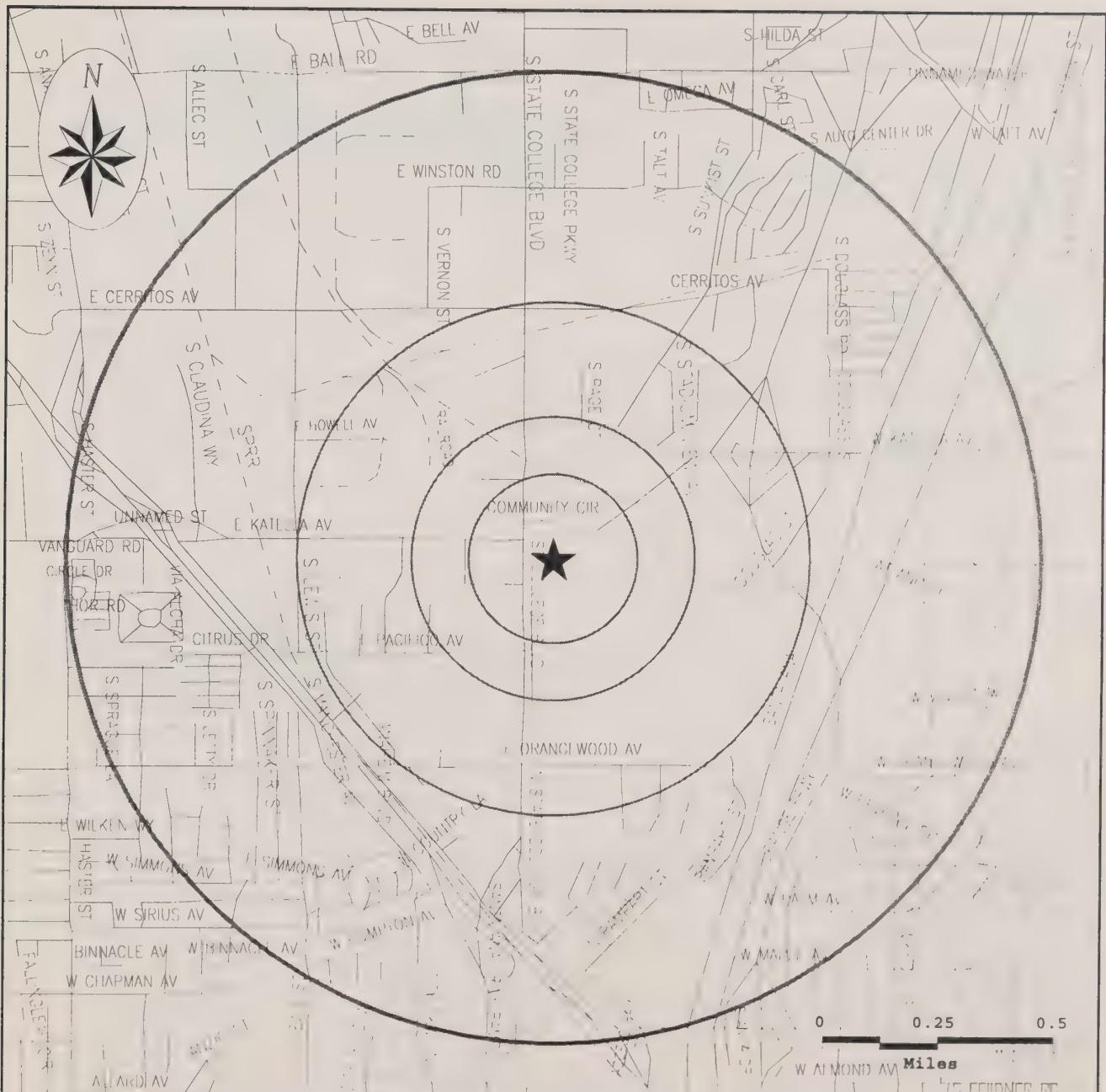
Report ID: 078584-001

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SITE ASSESSMENT PLUS REPORT

Street Map



Subject Site



Roads, Highways, Rivers, Water Bodies
Railroads, Utilities

SITE ASSESSMENT PLUS REPORT

SITE INVENTORY

MAP ID	PROPERTY AND THE ADJACENT AREA (within 1/8 mile)	VISTA ID DISTANCE DIRECTION	A				B				C				D			
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	UNIQUE CO	ERNS
1A	UNOCAL SERVICE STATION #5698 2001 KATELLA AVENUE EAST ANAHEIM, CA	4286273 <0.01 MI NW					X											
1B	ARCO SERVICE STATION #6220 1801 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806	4043697 0.02 MI W						X							X			
1C	SOUTHERN CALIF GAS CO 1919 S STATE COLLEGE ANAHEIM, CA 92806	1281833 0.03 MI NW													X			
2	CALIFORNIA CUSTOM SHAPES INC 1800 TALBOT WY ANAHEIM, CA 92805	4063345 0.04 MI SW																X
3	STADIUM MOTORS, INC 2225 KATELLA AVE ANAHEIM, CA 92806	395810 0.11 MI NE					X		X					X			X	

MAP ID	SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)	VISTA ID DISTANCE DIRECTION	A				B				C				D			
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	UNIQUE CO	ERNS
4	CETRON CORPORATION 1701 STATE COLLEGE BLVD SOUTH ANAHEIM, CA	5358874 0.16 MI N					X											
4	CERTRON CORP 1701 S STATE COLLEGE BLVD ANAHEIM, CA 92806	76230 0.16 MI N							X									.
5	SHELL (0222-2705) 2331 E KATELLA CARSON, CA 90749	1151427 0.21 MI NE														X		
6	TEXACO SERVICE STATION 1650 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806	1186337 0.22 MI N								X								
7	ROCKY MOUNTAIN INDUSTRIES INC 1880 CHRIS LANE ANAHEIM, CA 92805	358633 0.23 MI W												X			.	



X = search criteria; • = tag-along (beyond search criteria).

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Report ID: 078584-001

Version 2.3

Date of Report: July 13, 1995

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MAP ID	SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)	VISTA ID DISTANCE DIRECTION	A				B				C				D			
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	UNIQUE CO	ERNS
8	ITASCO 2211 E HOWELL ST ANAHEIM, CA 92804	212769 0.26 MI NE				X X												
9	DEL PISO BRICK COMPANY 1635 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806	4286705 0.34 MI N							X									
10	MALIBU GRAND PRIX 2430 E KATELLA ANAHEIM, CA 92806	933016 0.35 MI NE							X									*
11	NORCO DELIVERY SVCE, INC 1500 E BABBITT AVE ANAHEIM, CA 92805	298606 0.36 MI NW							X							*		*
12	LAMCOR, INC. 2025 ORANGEWOOD AVENUE, EAST ANAHEIM, CA 92806	1183619 0.38 MI S							X									
12	EVEREST ELECTRONIC 2100 ORANGEWOOD AVENUE, EAST ANAHEIM, CA 92806	143919 0.40 MI S							X									
13	ORANGE EMPIRE 1000 E KATELLA ANAHEIM, CA 92805	311330 0.40 MI W			X X													
13	JAYCOX DISPOSAL 1016 E KATELLA AVE ANAHEIM, CA 92805	215339 0.41 MI W							X									*
14	UNOCAL SERVICE STATION 902 KATELLA AVENUE, EAST ANAHEIM, CA 92805	2747565 0.48 MI W							X		X							
14	UNOCAL SERVICE STATION #8800 1818 LEWIS STREET, SOUTH ANAHEIM, CA 92805	1204702 0.49 MI W							X		X							

MAP ID	SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)	VISTA ID DISTANCE DIRECTION	A				B				C				D	
			NPL	CORRACTS	TSD	SPL	CERCLIS	SCL	LUST	SWLF	DEED RSTR	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST

No Records Found



X = search criteria; • = tag-along (beyond search criteria).

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UNMAPPED SITES		VISTA ID	NPL	A	B	C	D							
			CORRACTS	TSD	SPL	CERCLIS	DEED RSTR	CORTESE	TOXIC PITS	RCRA VIOL	TRIS	UST/AST	UNIQUE CO	GNRTR
CORONA DUMP		1580080				X								
ANAHEIM, CA						X								
ORANGE COUNTY WATER DISTRICT		4822881												
ORANGE, CA														
CONSOLIDATED ROCK PRODUCTS, IN		1186194				X								
NE1/4 OF SE1/4 OF SEC. 28 T4S,														
ORANGE, CA														
HARRY JUNG ENTERPRISES		933036				X								
KATELLA AVENUE, WEST														
ANAHEIM, CA 92805														



X = search criteria; • = tag-along (beyond search criteria).

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SITE ASSESSMENT PLUS REPORT

DETAILS

PROPERTY AND THE ADJACENT AREA (within 1/8 mile)

VISTA Address*:	UNOCAL SERVICE STATION #5698 2001 KATELLA AVENUE EAST ANAHEIM, CA	VISTA ID#: Distance/Direction: Plotted as:	4286273 <0.01 MI / NW Point	Map ID 1A
Regional LUST - Regional Leaking Underground Storage Tank / SRC#	2290	Agency ID:	083001162 T	
Agency Address:	SAME AS ABOVE			
Tank Status:	NOT AVAILABLE			
Media Affected:	SOIL/SAND/LAND			
Substance:	WASTE OIL			
Leak Cause:	UNAVAILABLE			
Remedial Action:	EXCAVATE TREAT			
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE			
Remedial Status 2:	NOT AVAILABLE			
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>			
VISTA Address*:	ARCO SERVICE STATION #6220 1801 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806	VISTA ID#: Distance/Direction: Plotted as:	4043697 0.02 MI / W Point	Map ID 1B
STATE LUST - State Leaking Underground Storage Tank / SRC#	2296	Agency ID:	083001205T	
Agency Address:	ARCO SERVICE STATION #6220 1801 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806			
Tank Status:	NOT AVAILABLE			
Media Affected:	SOIL/SAND/LAND			
Substance:	UNLEADED GAS			
Leak Cause:	UNAVAILABLE			
Remedial Action:	EXCAVATE TREAT			
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE			
Remedial Status 2:	NOT AVAILABLE			
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>			
Regional LUST - Regional Leaking Underground Storage Tank / SRC#	2290	Agency ID:	083001205 T	
Agency Address:	ARCO FACILITY #6220 1801 S STATE COLLEGE ANAHEIM, CA 92805			
Tank Status:	NOT AVAILABLE			
Media Affected:	SOIL/SAND/LAND			
Substance:	UNLEADED GAS			
Leak Cause:	UNAVAILABLE			
Remedial Action:	EXCAVATE TREAT			
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE			
Remedial Status 2:	NOT AVAILABLE			
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>			



* VISTA address includes enhanced city and ZIP.

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PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.

STATE UST - State Underground Storage Tank / SRC# 1612		EPA/Agency ID:	N/A
Agency Address:	ARCO FACILITY #6220 1801 S STATE COLLEGE ANAHEIM, CA 92805		
Underground Tanks:	3		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID: 1		Tank Status: ACTIVE/IN SERVICE	
Tank Contents: UNLEADED GAS		Leak Monitoring: UNKNOWN	
Tank Age: NOT REPORTED		Tank Piping: GALVANIZED STEEL	
Tank Size (Units): 8000 (GALLONS)		Tank Material: SEC. CONTAINMENT	
Tank ID: 2		Tank Status: ACTIVE/IN SERVICE	
Tank Contents: UNLEADED GAS		Leak Monitoring: UNKNOWN	
Tank Age: NOT REPORTED		Tank Piping: GALVANIZED STEEL	
Tank Size (Units): 10000 (GALLONS)		Tank Material: SEC. CONTAINMENT	
Tank ID: 3		Tank Status: ACTIVE/IN SERVICE	
Tank Contents: UNLEADED GAS		Leak Monitoring: UNKNOWN	
Tank Age: NOT REPORTED		Tank Piping: GALVANIZED STEEL	
Tank Size (Units): 10000 (GALLONS)		Tank Material: SEC. CONTAINMENT	

VISTA Address*:	SOUTHERN CALIF GAS CO 1919 S STATE COLLEGE ANAHEIM, CA 92806	VISTA ID#:	1281833
		Distance/Direction:	0.03 MI / NW

Map ID

1C

STATE UST - State Underground Storage Tank / SRC# 1612		EPA/Agency ID:	N/A
Agency Address:	SOUTHERN CALIF GAS CO 1919 S STATE COLLEGE ANAHEIM, CA 92805		
Underground Tanks:	2		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID: 2		Tank Status: ACTIVE/IN SERVICE	
Tank Contents: REPORTED AS "UNKNOWN" BY AGENCY		Leak Monitoring: UNKNOWN	
Tank Age: NOT REPORTED		Tank Piping: UNKNOWN	
Tank Size (Units): NOT REPORTED (GALLONS)		Tank Material: UNKNOWN	
Tank ID: 5		Tank Status: ACTIVE/IN SERVICE	
Tank Contents: UNLEADED GAS		Leak Monitoring: UNKNOWN	
Tank Age: NOT REPORTED		Tank Piping: PLASTIC	
Tank Size (Units): 12000 (GALLONS)		Tank Material: CONCRETE	

VISTA Address*:	CALIFORNIA CUSTOM SHAPES INC 1800 TALBOT WY ANAHEIM, CA 92805	VISTA ID#:	4063345
		Distance/Direction:	0.04 MI / SW

Map ID

2

RCRA-SmGen - RCRA-Small Generator / SRC# 2271		EPA ID:	CAD983657685
Agency Address:	SAME AS ABOVE		
Generator Class:	GENERATORS WHO GENERATE 100 KG./MONTH BUT LESS THAN 1000 KG./MONTH OF NON-ACUTELY HAZARDOUS WASTE		
Generator Requirements Violation:	NO		
Violation of Corrective Action	NO		
Scheduled:			
Land Requirements Violation:	NO		



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PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.

VISTA Address*:	STADIUM MOTORS, INC 2225 KATELLA AVE ANAHEIM, CA 92806	VISTA ID#: Distance/Direction: Plotted as:	395810 0.11 MI / NE Point
RCRA-LgGen - RCRA-Large Generator / SRC# 2271		EPA ID:	CAD981447949
Agency Address:	SAME AS ABOVE		
Generator Class:	GENERATORS WHO GENERATE AT LEAST 1000 KG./MONTH OF NON-ACUTELY HAZARDOUS WASTE OR 1 KG./MONTH OF ACUTELY HAZARDOUS WASTE.		
Generator Requirements Violation:	NO		
Violation of Corrective Action	NO		
Scheduled:			
Land Requirements Violation:	NO		
RCRA-SmGen - RCRA-Small Generator / SRC# 2271		EPA ID:	CAD981978547
Agency Address:	STADIUM MOTORS INC 2225 E KATELLA AVE ANAHEIM, CA 92806		
Generator Class:	GENERATORS WHO GENERATE 100 KG./MONTH BUT LESS THAN 1000 KG./MONTH OF NON-ACUTELY HAZARDOUS WASTE		
Generator Requirements Violation:	NO		
Violation of Corrective Action	NO		
Scheduled:			
Land Requirements Violation:	NO		
STATE LUST - State Leaking Underground Storage Tank / SRC# 2296		Agency ID:	083001785T
Agency Address:	STADIUM MOTORS 2225 KATELLA AVENUE, EAST ANAHEIM, CA 92806		
Tank Status:	NOT AVAILABLE		
Media Affected:	SOIL/SAND/LAND		
Substance:	WASTE OIL		
Leak Cause:	UNAVAILABLE		
Remedial Action:	NOT AVAILABLE		
Remedial Status 1:	REM ACTION PLAN		
Remedial Status 2:	NOT AVAILABLE		
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source		
Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083001785 T
Agency Address:	SAME AS ABOVE		
Tank Status:	NOT AVAILABLE		
Media Affected:	SOIL/SAND/LAND		
Substance:	WASTE OIL		
Leak Cause:	UNAVAILABLE		
Remedial Action:	NOT AVAILABLE		
Remedial Status 1:	REM ACTION PLAN		
Remedial Status 2:	NOT AVAILABLE		
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source		
STATE UST - State Underground Storage Tank / SRC# 1612		EPA/Agency ID:	N/A
Agency Address:	STADIUM MOTORS INC 2225 E KATELLA ANAHEIM, CA 92805		
Underground Tanks:	5		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	3	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	JET FUEL	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	250 (GALLONS)	Tank Material:	BARE STEEL



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PROPERTY AND THE ADJACENT AREA (within 1/8 mile) CONT.

Tank ID:	14	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	JET FUEL	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	250 (GALLONS)	Tank Material:	BARE STEEL
Tank ID:	15	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	UNLEADED GAS	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	2000 (GALLONS)	Tank Material:	BARE STEEL
Tank ID:	16	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	JET FUEL	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	250 (GALLONS)	Tank Material:	BARE STEEL
Tank ID:	17	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	AGENCY REPORTS THE UNDEFINED TERM "OTHER"	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	1000 (GALLONS)	Tank Material:	BARE STEEL
Tank ID:	18	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	AGENCY REPORTS THE UNDEFINED TERM "OTHER"	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	550 (GALLONS)	Tank Material:	BARE STEEL
CORTESE / SRC# 2298		EPA/Agency ID:	N/A
Agency Address:	STADIUM MOTORS 2225 KATELLA AVE E. ANAHEIM, CA		
List Name:	LEAKING TANK		
Site ID:	INV-ID30-001129		

SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile)

VISTA Address*:	CETRON CORPORATION 1701 STATE COLLEGE BLVD SOUTH ANAHEIM, CA	VISTA ID#:	5358874
		Distance/Direction:	0.16 MI / N
		Plotted as:	Point
Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290	Agency ID:	083000912	T
Agency Address:	SAME AS ABOVE		
Tank Status:	NOT AVAILABLE		
Media Affected:	SOIL/SAND/LAND		
Substance:	TOULENE/TOLUOL		
Leak Cause:	UNAVAILABLE		
Remedial Action:	NOT AVAILABLE		
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE		
Remedial Status 2:	NOT AVAILABLE		
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source		

Map ID

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SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.

VISTA Address*:	CERTRON CORP 1701 S STATE COLLEGE BLVD ANAHEIM, CA 92806	VISTA ID#: Distance/Direction: Plotted as:	76230 0.16 MI / N Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 2296	Agency ID:	083000912T	
Agency Address:		CERTRON CORPORATION 1701 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806	
Tank Status:		NOT AVAILABLE	
Media Affected:		SOIL/SAND/LAND	
Substance:		TOULENE/TOLUOL	
Leak Cause:		UNAVAILABLE	
Remedial Action:		NOT AVAILABLE	
Remedial Status 1:		CASE CLOSED/CLEANUP COMPLETE	
Remedial Status 2:		NOT AVAILABLE	
Fields Not Reported:		Discovery Date, Quantity (Units), Leak Source	
VISTA Address*:	SHELL (0222-2705) 2331 E KATELLA CARSON, CA 90749	VISTA ID#: Distance/Direction: Plotted as:	1151427 0.21 MI / NE Point
STATE UST - State Underground Storage Tank / SRC# 1612	EPA/Agency ID:	N/A	
Agency Address:		SHELL (0222-2705) 2331 E KATELLA ANAHEIM, CA 92806	
Underground Tanks:		4	
Aboveground Tanks:		NOT REPORTED	
Tanks Removed:		NOT REPORTED	
Tank ID:	1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	JET FUEL	Leak Monitoring:	MONITOR PRESENT
Tank Age:	NOT REPORTED	Tank Piping:	PLASTIC
Tank Size (Units):	550 (GALLONS)	Tank Material:	FIBERGLASS
Tank ID:	6	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	DIESEL	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS
Tank ID:	7	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	UNLEADED GAS	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS
Tank ID:	8	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	LEADED GAS	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	10000 (GALLONS)	Tank Material:	FIBERGLASS

Map ID
4

Map ID
5



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SITES IN THE SURROUNDING AREA (within 1/8 - 1/4 mile) CONT.

VISTA Address*:	TEXACO SERVICE STATION 1650 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806	VISTA ID#: Distance/Direction: Plotted as:	1186337 0.22 MI / N Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 2296		Agency ID:	083000207T
Agency Address: SAME AS ABOVE Tank Status: NOT AVAILABLE Media Affected: SOIL/SAND/LAND Substance: GASOLINE (UNSPECIFIED) Leak Cause: UNAVAILABLE Remedial Action: EXCAVATE TREAT Remedial Status 1: CASE CLOSED/CLEANUP COMPLETE Remedial Status 2: NOT AVAILABLE Fields Not Reported: Discovery Date, Quantity (Units), Leak Source			
Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083000207 T
Agency Address: TEXACO OIL 1650 STATE COLLEGE AVE ANAHEIM, CA 92806 Tank Status: NOT AVAILABLE Media Affected: SOIL/SAND/LAND Substance: GASOLINE (UNSPECIFIED) Leak Cause: UNAVAILABLE Remedial Action: EXCAVATE TREAT Remedial Status 1: CASE CLOSED/CLEANUP COMPLETE Remedial Status 2: NOT AVAILABLE Fields Not Reported: Discovery Date, Quantity (Units), Leak Source			
VISTA Address*:	ROCKY MOUNTAIN INDUSTRIES INC 1880 CHRIS LANE ANAHEIM, CA 92805	VISTA ID#: Distance/Direction: Plotted as:	358633 0.23 MI / W Point
STATE UST - State Underground Storage Tank / SRC# 1612		EPA/Agency ID:	N/A
Agency Address:	ROCKY MOUNTAIN WATER INC 1880 S CHRIS ANAHEIM, CA 92805		
Underground Tanks:	1		
Aboveground Tanks:	NOT REPORTED		
Tanks Removed:	NOT REPORTED		
Tank ID:	1	Tank Status:	ACTIVE/IN SERVICE
Tank Contents:	UNLEADED GAS	Leak Monitoring:	UNKNOWN
Tank Age:	NOT REPORTED	Tank Piping:	UNKNOWN
Tank Size (Units):	12000 (GALLONS)	Tank Material:	BARE STEEL

Map ID

6

Map ID

7



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SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile)

VISTA Address*:	ITASCO 2211 E HOWELL ST ANAHEIM, CA 92804	VISTA ID#: Distance/Direction: Plotted as:	212769 0.26 MI / NE Point
-----------------	---	--	---------------------------------

CERCLIS / SRC# 2241 EPA ID: CAD982359879

Agency Address: SAME AS ABOVE
 NPL Status: NOT A PROPOSED, CURRENT, OR DELETED NPL SITE
 Site Ownership: PRIVATE/NON-GOVERNMENTAL
 Lead Agency: NO DETERMINATION
 Site Description: NOT REPORTED

Event Type:	Lead Agency:	Event Status:	Start Date:	Completion Date:
DISCOVERY	STATE	NOT REPORTED	NOT REPORTED	DECEMBER 1, 1987
PRELIMINARY	STATE	NOT REPORTED	NOT REPORTED	AUGUST 1, 1988
ASSESSMENT				
SCREENING SITE	STATE	NOT REPORTED	NOT REPORTED	JANUARY 25, 1990
INSPECTION				
LISTING SITE	EPA FUND FINANCED	NO FURTHER REMEDIAL ACTION PLANNED	JULY 29, 1992	SEPTEMBER 23, 1993
INSPECTION				

Regional CERCLIS / SRC# 2230 EPA ID: CAD982359879

Agency Address: SAME AS ABOVE

Regional Utility Description:

NEW CERCLIS SITE
LOW PRIORITY

SCL - State Equivalent CERCLIS List / SRC# 2292 Agency ID: 30280129

Agency Address: ITASCO
2211 EAST HOWELL STREET
ANAHEIM, CA 92804
 Facility Type: NOT AVAILABLE
 Lead Agency: NOT AVAILABLE
 State Status: REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) LEAD
 Pollutant 1: POLYCHLORINATED BIPHENYLS
 Pollutant 2: OTHER ORGANIC SOLIDS
 Pollutant 3: OXYGENATED SOLVENTS
 Fields Not Reported: Status

VISTA Address*:	DEL PISO BRICK COMPANY 1635 STATE COLLEGE BLVD, SOUTH ANAHEIM, CA 92806	VISTA ID#: Distance/Direction: Plotted as:	4286705 0.34 MI / N Point
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STATE LUST - State Leaking Underground Storage Tank / SRC# 2296 Agency ID: 083000125T

Agency Address: SAME AS ABOVE
 Tank Status: NOT AVAILABLE
 Media Affected: SOIL/SAND/LAND
 Substance: GASOLINE (UNSPECIFIED)
 Leak Cause: UNAVAILABLE
 Remedial Action: NOT AVAILABLE
 Remedial Status 1: CASE CLOSED/CLEANUP COMPLETE
 Remedial Status 2: NOT AVAILABLE
 Fields Not Reported: Discovery Date, Quantity (Units), Leak Source

Map ID

8

Map ID

9



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SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083000125 T
Agency Address:	DEL PISO BRICK COMPANY 1635 STATE COLLEGE BLVD SOUTH ANAHEIM, CA		
Tank Status:	NOT AVAILABLE		
Media Affected:	SOIL/SAND/LAND		
Substance:	GASOLINE (UNSPECIFIED)		
Leak Cause:	UNAVAILABLE		
Remedial Action:	NOT AVAILABLE		
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE		
Remedial Status 2:	NOT AVAILABLE		
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source		

VISTA Address*: 2296	MALIBU GRAND PRIX 2430 E KATELLA ANAHEIM, CA 92806	VISTA ID#: 933016 Distance/Direction: 0.35 MI / NE Plotted as: Point
STATE LUST - State Leaking Underground Storage Tank / SRC# 2296	Agency ID:	083000236T

Map ID
10

Agency Address:	MALIBU GRAND PRIX CORPORATION 2430 KATELLA AVENUE, EAST ANAHEIM, CA 92806	
Tank Status:	NOT AVAILABLE	
Media Affected:	GROUNDWATER	
Substance:	GASOLINE (UNSPECIFIED)	
Leak Cause:	UNAVAILABLE	
Remedial Action:	VACUUM EXTRACT	
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE	
Remedial Status 2:	NOT AVAILABLE	
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source	

Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290	Agency ID:	083000236 T
---	------------	-------------

Agency Address:	MALIBU GRAND PRIX CORPORATION 2430 EAST KATELLA AVENUE ANAHEIM, CA 92806	
Tank Status:	NOT AVAILABLE	
Media Affected:	GROUNDWATER	
Substance:	GASOLINE (UNSPECIFIED)	
Leak Cause:	UNAVAILABLE	
Remedial Action:	VACUUM EXTRACT	
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE	
Remedial Status 2:	NOT AVAILABLE	
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source	

SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

VISTA Address*:	NORCO DELIVERY SVCE, INC 1500 E BABBITT AVE ANAHEIM, CA 92805	VISTA ID#:	298606
		Distance/Direction:	0.36 MI / NW

Map ID

11

STATE LUST - State Leaking Underground Storage Tank / SRC# 2296	Agency ID:	083000298T
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Agency Address:	NORCO DELIVERY SERVICE, INC. 1500 BABBITT STREET ANAHEIM, CA 92805
Tank Status:	NOT AVAILABLE
Media Affected:	GROUNDWATER
Substance:	DIESEL
Leak Cause:	UNAVAILABLE
Remedial Action:	VACUUM EXTRACT
Remedial Status 1:	MONITORING
Remedial Status 2:	NOT AVAILABLE
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>

Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290	Agency ID:	083000298 T
---	------------	-------------

Agency Address:	NORCO DELIVERY SVCE, INC. 1500 E BABBITT AVE ANAHEIM, CA 92803
Tank Status:	NOT AVAILABLE
Media Affected:	NOT AVAILABLE
Substance:	DIESEL
Leak Cause:	UNAVAILABLE
Remedial Action:	VACUUM EXTRACT
Remedial Status 1:	MONITORING
Remedial Status 2:	NOT AVAILABLE
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>

VISTA Address*:	LAMCOR, INC. 2025 ORANGEWOOD AVENUE, EAST ANAHEIM, CA 92806	VISTA ID#:	1183619
		Distance/Direction:	0.38 MI / S

Map ID

12

STATE LUST - State Leaking Underground Storage Tank / SRC# 2296	Agency ID:	083001135T
--	------------	------------

Agency Address:	SAME AS ABOVE
Tank Status:	NOT AVAILABLE
Media Affected:	SOIL/SAND/LAND
Substance:	GASOLINE (UNSPECIFIED)
Leak Cause:	UNAVAILABLE
Remedial Action:	NOT AVAILABLE
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE
Remedial Status 2:	NOT AVAILABLE
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>



SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083001135 T
Agency Address:	LAMCOR, INC. 2025 E ORANGEWOOD AVE ANAHEIM, CA 92806		
Tank Status:	NOT AVAILABLE		
Media Affected:	SOIL/SAND/LAND		
Substance:	GASOLINE (UNSPECIFIED)		
Leak Cause:	UNAVAILABLE		
Remedial Action:	NOT AVAILABLE		
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE		
Remedial Status 2:	NOT AVAILABLE		
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source		

Map ID

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STATE LUST - State Leaking Underground Storage Tank / SRC# 2296		Agency ID:	083001474T
Agency Address:	SAME AS ABOVE		
Tank Status:	NOT AVAILABLE		
Media Affected:	SOIL/SAND/LAND		
Substance:	GASOLINE (UNSPECIFIED)		
Leak Cause:	UNAVAILABLE		
Remedial Action:	NOT AVAILABLE		
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE		
Remedial Status 2:	NOT AVAILABLE		
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source		

Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083001474 T
Agency Address:	EVEREST ELECTRONIC EQUIP INC 2100 E ORANGEWOOD AVE ANAHEIM, CA 92806		
Tank Status:	NOT AVAILABLE		
Media Affected:	SOIL/SAND/LAND		
Substance:	GASOLINE (UNSPECIFIED)		
Leak Cause:	UNAVAILABLE		
Remedial Action:	NOT AVAILABLE		
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE		
Remedial Status 2:	NOT AVAILABLE		
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source		

Map ID

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CERCLIS / SRC# 2241		EPA ID:	CAD049903271
Agency Address:	SAME AS ABOVE		
NPL Status:	NOT A PROPOSED, CURRENT, OR DELETED NPL SITE		
Site Ownership:	PRIVATE/NON-GOVERNMENTAL		
Lead Agency:	NO DETERMINATION		
Site Description:	NOT REPORTED		
Event Type:	Lead Agency:	Event Status:	Start Date:
DISCOVERY	STATE	NOT REPORTED	NOT REPORTED
			Completion Date:
			DECEMBER 1, 1987



* VISTA address includes enhanced city and ZIP.

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SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

Event Type: PRELIMINARY ASSESSMENT	Lead Agency: STATE	Event Status: NO FURTHER REMEDIAL ACTION PLANNED	Start Date: NOT REPORTED	Completion Date: NOVEMBER 14, 1988					
Regional CERCLIS / SRC# 2230		EPA ID:		CAD049903271					
Agency Address: <i>SAME AS ABOVE</i>									
Regional Utility Description: <i>RCRA REGULATED GENERATOR</i>									
SCL - State Equivalent CERCLIS List / SRC# 2292		Agency ID:	30330009						
Agency Address: <i>ORANGE EMPIRE 1000 EAST KATELLA ANAHEIM, CA 92805</i>									
Facility Type:	NOT AVAILABLE								
Lead Agency:	NOT AVAILABLE								
State Status:	NO FURTHER ACTION FOR DTSC								
Pollutant 1:	UNSPECIFIED AQUEOUS SOLUTION								
Pollutant 2:	UNKNOWN								
Pollutant 3:	UNKNOWN								
Fields Not Reported:	<i>Status</i>								
VISTA Address*:	JAYCOX DISPOSAL 1016 E KATELLA AVE ANAHEIM, CA 92805	VISTA ID#: Distance/Direction: Plotted as:	215339 0.41 MI / W Point						
STATE LUST - State Leaking Underground Storage Tank / SRC# 2296		Agency ID:	083001097T						
Agency Address: <i>JAYCOX DISPOSAL 1016 KATELLA AVENUE, EAST ANAHEIM, CA 92803</i>									
Tank Status:	NOT AVAILABLE								
Media Affected:	SOIL/SAND/LAND								
Substance:	PERCHLOROETHYLENE/PERC								
Leak Cause:	UNAVAILABLE								
Remedial Action:	NOT AVAILABLE								
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE								
Remedial Status 2:	NOT AVAILABLE								
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>								
Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083001097 T						
Agency Address: <i>JAYCOX DISPOSAL 1016 E KATELLA AVE ANAHEIM, CA 90805</i>									
Tank Status:	NOT AVAILABLE								
Media Affected:	SOIL/SAND/LAND								
Substance:	PERCHLOROETHYLENE/PERC								
Leak Cause:	UNAVAILABLE								
Remedial Action:	NOT AVAILABLE								
Remedial Status 1:	CASE CLOSED/CLEANUP COMPLETE								
Remedial Status 2:	NOT AVAILABLE								
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>								

Map ID

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SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

VISTA Address*:	UNOCAL SERVICE STATION 902 KATELLA AVENUE, EAST ANAHEIM, CA 92805	VISTA ID#: Distance/Direction: Plotted as:	2747565 0.48 MI / W Point	Map ID 14
STATE LUST - State Leaking Underground Storage Tank / SRC# 2296		Agency ID:	083001795T	
Agency Address:	UNOCAL SERVICE STATION 902 KATELLA AVENUE, EAST ANAHEIM, CA 92805			
Tank Status:	NOT AVAILABLE			
Media Affected:	SOIL/SAND/LAND			
Substance:	GASOLINE (UNSPECIFIED)			
Leak Cause:	UNAVAILABLE			
Remedial Action:	NOT AVAILABLE			
Remedial Status 1:	REM ACTION PLAN			
Remedial Status 2:	NOT AVAILABLE			
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>			
Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083001795 T	
Agency Address:	UNOCAL SERVICE STATION #8800 902 KATELLA AVENUE ANAHEIM, CA			
Tank Status:	NOT AVAILABLE			
Media Affected:	SOIL/SAND/LAND			
Substance:	GASOLINE (UNSPECIFIED)			
Leak Cause:	UNAVAILABLE			
Remedial Action:	NOT AVAILABLE			
Remedial Status 1:	REM ACTION PLAN			
Remedial Status 2:	NOT AVAILABLE			
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>			
CORTESE / SRC# 2298		EPA/Agency ID:	N/A	
Agency Address:	UNOCAL SERVICE STATION 902 KATELLA AVE E. ANAHEIM, CA 92806			
List Name:	LEAKING TANK			
Site ID:	INV-ID30-001137			
VISTA Address*:	UNOCAL SERVICE STATION #8800 1818 LEWIS STREET, SOUTH ANAHEIM, CA 92805	VISTA ID#: Distance/Direction: Plotted as:	1204702 0.49 MI / W Point	Map ID 14
STATE LUST - State Leaking Underground Storage Tank / SRC# 2296		Agency ID:	083001680T	
Agency Address:	SAME AS ABOVE			
Tank Status:	NOT AVAILABLE			
Media Affected:	SOIL/SAND/LAND			
Substance:	GASOLINE (UNSPECIFIED)			
Leak Cause:	UNAVAILABLE			
Remedial Action:	NOT AVAILABLE			
Remedial Status 1:	PRELIMINARY ASSESSMENT			
Remedial Status 2:	NOT AVAILABLE			
Fields Not Reported:	<i>Discovery Date, Quantity (Units), Leak Source</i>			



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SITES IN THE SURROUNDING AREA (within 1/4 - 1/2 mile) CONT.

Regional LUST - Regional Leaking Underground Storage Tank / SRC# 2290		Agency ID:	083001680	T
Agency Address:	UNOCAL SERVICE STATION #8800 1818 LEWIS STREET, SOUTH ANAHEIM, CA			
Tank Status:	NOT AVAILABLE			
Media Affected:	SOIL/SAND/LAND			
Substance:	GASOLINE (UNSPECIFIED)			
Leak Cause:	UNAVAILABLE			
Remedial Action:	NOT AVAILABLE			
Remedial Status 1:	PRELIMINARY ASSESSMENT			
Remedial Status 2:	NOT AVAILABLE			
Fields Not Reported:	Discovery Date, Quantity (Units), Leak Source			
CORTESE / SRC# 2298	EPA/Agency ID:	N/A		
Agency Address:	UNOCAL SERVICE STATION #8800 1818 LEWIS ST S. ANAHEIM, CA 92805			
List Name:	LEAKING TANK			
Site ID:	INV-ID30-001086			

SITES IN THE SURROUNDING AREA (within 1/2 - 1 mile)

No Records Found



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UNMAPPED SITES

VISTA Address*:	CORONA DUMP - ANAHEIM, CA	VISTA ID#:	1580080
County SWLF - County Solid Waste Landfill / SRC# 150		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Type:	NOT AVAILABLE		
Facility Status:	NOT AVAILABLE		
Permit Status:	NOT AVAILABLE		
County SWLF - County Solid Waste Landfill / SRC# 150		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Type:	NOT AVAILABLE		
Facility Status:	NOT AVAILABLE		
Permit Status:	NOT AVAILABLE		
VISTA Address*:	ORANGE COUNTY WATER DISTRICT ORANGE, CA	VISTA ID#:	4822881
WMUDS / SRC# 1734		Agency ID:	8 300070NUR
Agency Address:	SAME AS ABOVE		
Solid Waste Inventory System ID:	NOT REPORTED		
Facility Type:	Not reported		
Facility In State Board Waste Discharger System:	NO		
Chapter 15 Facility:	NO		
Solid Waste Assessment Test Facility:	YES		
Toxic Pits Cleanup Act Facility:	NO		
RCRA Facility:	NO		
Department of Defense Facility:	NO		
Open To Public:	NO		
Number Of Waste Management Units:	1		
Rank:	14		
Enforcements At Facility:	NO		
Violations At Facility:	NO		
VISTA Address*:	CONSOLIDATED ROCK PRODUCTS, INC. NE1/4 OF SE1/4 OF SEC. 28 T4S, ORANGE, CA	VISTA ID#:	1186194
County SWLF - County Solid Waste Landfill / SRC# 150		EPA/Agency ID:	N/A
Agency Address:	SAME AS ABOVE		
Facility Type:	NOT AVAILABLE		
Facility Status:	NOT AVAILABLE		
Permit Status:	NOT AVAILABLE		

SITE ASSESSMENT PLUS REPORT

DESCRIPTION OF DATABASES SEARCHED

A) DATABASES SEARCHED TO 1 MILE

NPL
SRC#: 2324 VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for NPL was April, 1995.

The National Priorities List (NPL) is the EPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program. A site must meet or surpass a predetermined hazard ranking system score, be chosen as a state's top priority site, or meet three specific criteria set jointly by the US Dept of Health and Human Services and the US EPA in order to become an NPL site.

SPL
SRC#: 2293 VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for Calsites Database: Annual Workplan Sites was April, 1995.

This database is provided by the Cal. Environmental Protection Agency, Dept. of Toxic Substances Control. Annual Work Plan (AWP) sites and sites where Preliminary Endangerment Assessments are a high priority are included.

CORRACTS
SRC#: 2271 VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for RCRA Corrective Action Sites List was March, 1995.

The EPA maintains this database of RCRA facilities which are undergoing "corrective action". A "corrective action order" is issued pursuant to RCRA Section 3008 (h) when there has been a release of hazardous waste or constituents into the environment from a RCRA facility. Corrective actions may be required beyond the facility's boundary and can be required regardless of when the release occurred, even if it predates RCRA.

RCRA-TSD
SRC#: 2271 VISTA conducts a database search to identify all sites within 1 mile of your property.
The agency release date for RCRIS was March, 1995.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA TSDs are facilities which treat, store and/or dispose of hazardous waste.

B) DATABASES SEARCHED TO 1/2 MILE

CERCLIS
SRC#: 2240 VISTA conducts a database search to identify all sites within 1/2 mile of your property.
The agency release date for CERCLIS was March, 1995.

The CERCLIS List contains sites which are either proposed to or on the National Priorities List(NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL. The information on each site includes a history of all pre-remedial, remedial, removal and community relations activities or events at the site, financial funding information for the events, and unrestricted enforcement activities.



CERCLIS SRC#: 2241	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for CERCLIS was March, 1995. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.
Cal Cerclis SRC#: 2230	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Ca Cerclis w/Regional Utility Description was January, 1995. This database is provided by the U.S. Environmental Protection Agency, Region 9. These are regional utility descriptions for California CERCLIS sites.
SCL SRC#: 2292	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Calsites Database: All Sites except Annual Workplan Sites (incl. ASPIS) was April, 1995. This database is provided by the Department of Toxic Substances Control. These are lower priority than the SPL sites.
SWLF SRC#: 2167	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Los Angeles County Landfills and Transfer Stations was October, 1994. This database is provided by the Public Health Investigations, Hazardous Material Control Program.
SWLF SRC#: 2232	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Ca Solid Waste Information System (SWIS) was March, 1995. This database is provided by the Integrated Waste Management Board.
Orange County Landfill SRC#: 150	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Orange County Landfills was July, 1991. This database is provided by the Orange County Health Care Agency.
LAC-Landfills SRC#: 2167	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Los Angeles County Landfills and Transfer Stations was October, 1994. This database is provided by the Public Health Investigations, Hazardous Material Control Program.
WMUDS SRC#: 1734	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Waste Management Unit Database System (WMUDS) was March, 1994. This database is provided by the State Water Resources Control Board. This is used for program tracking and inventory of waste management units. This system contains information from the following eight main databases: Facility, Waste Management Unit, SWAT Program Information, SWAT Report Summary Information, Chapter 15 (formerly Subchapter 15), TPCA Program Information, RCRA Program Information, and Closure Information.

LUST SRC#: 2296	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Lust Information System (LUSTIS) was February, 1995. This database is provided by the California Environmental Protection Agency.
LUST RG4 SRC#: 2286	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Region #4-UST Leak List was April, 1995. This database is provided by the Regional Water Quality Control Board, Region #4.
LUST RG6 SRC#: 2288	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Region #6-Leaking Underground Storage Tank Listing was April, 1995. This database is provided by the Regional Water Quality Control Board, Region #6.
LUST RG8 SRC#: 2290	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Region #8-Santa Ana Regional Underground Tank Database List was April, 1995. This database is provided by the Regional Water Quality Control Board, Region #8.
LUST RG9 SRC#: 2291	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Region #9 Leaking Underground Storage Tank List was March, 1995. This database is provided by the Regional Water Quality Control Board, Region #9.
CORTESE SRC#: 2298	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Cortese List-Hazardous Waste Substance Site List was February, 1995. This database is provided by the Office of Environmental Protection, Office of Hazardous Materials.
Deed Restrictions SRC#: 1703	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Deed Restriction Properties Report was April, 1994. This database is provided by the Department of Health Services-Land Use and Air Assessment. These are voluntary deed restriction agreements with owners of property who propose building residences, schools, hospitals, or day care centers on property that is "on or within 2,000 feet of a significant disposal of hazardous waste".
Toxic Pits SRC#: 2229	VISTA conducts a database search to identify all sites within 1/2 mile of your property. The agency release date for Summary of Toxic Pits Cleanup Facilities was February, 1995. This database is provided by the Water Quality Control Board, Division of Loans Grants.

C) DATABASES SEARCHED TO 1/4 MILE

RCRA-Viols SRC#: 2271	VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for RCRIS was March, 1995. The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste.
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UST's SRC#: 1612	VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for Underground Storage Tank Registrations Database was January, 1994.
	This database is provided by the State Water Resources Control Board, Office of Underground Storage Tanks.
AST's SRC#: 2297	VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for Aboveground Storage Tank Database was February, 1995.
	This database is provided by the State Water Resources Control Board.
ORC-Gwtr Clean SRC#: 1912	VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for Orange County-Groundwater Cleanup Program was July, 1994.
	This database is provided by the Orange County Health Care Agency.
ORC-Indl Clnup SRC#: 1906	VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for Orange County-Industrial Cleanups was July, 1994.
	This database is provided by the Orange County Health Care Agency.
TRIS SRC#: 1954	VISTA conducts a database search to identify all sites within 1/4 mile of your property. The agency release date for TRIS was August, 1994.
	Section 313 of the Emergency Planning and Community Right-to-Know Act (also known as SARA Title III) of 1986 requires the EPA to establish an inventory of Toxic Chemicals emissions from certain facilities(Toxic Release Inventory System). Facilities subject to this reporting are required to complete a Toxic Chemical Release Form(Form R) for specified chemicals.

D) DATABASES SEARCHED TO 1/8 MILE

ERNS SRC#: 2255	VISTA conducts a database search to identify all sites within 1/8 mile of your property. The agency release date for ERNS was March, 1995.
	The Emergency Response Notification System (ERNS) is a national database used to collect information on reported releases of oil and hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the US Coast Guard, the National Response Center and the Department of transportation. A search of the database records for the period October 1986 through September 1994 revealed the following information regarding reported spills of oil or hazardous substances in the stated area.
RCRA-LgGen SRC#: 2271	VISTA conducts a database search to identify all sites within 1/8 mile of your property. The agency release date for RCRIS was March, 1995.
	The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Large Generators are facilities which generate at least 1000 kg./month of non-acutely hazardous waste (or 1 kg./month of acutely hazardous waste).

RCRA-SmGen
SRC#: 2271

VISTA conducts a database search to identify all sites within 1/8 mile of your property.
The agency release date for RCRIS was March, 1995.

The EPA's Resource Conservation and Recovery Act (RCRA) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. The RCRA Facilities database is a compilation by the EPA of facilities which report generation, storage, transportation, treatment or disposal of hazardous waste. RCRA Small and Very Small generators are facilities which generate less than 1000 kg./month of non-acutely hazardous waste.

End of Report



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